

THE SOCIAL EXPERIENCES OF SECONDARY STUDENTS
WITH INTELLECTUAL AND LEARNING DISABILITIES:
SCHOOL SAFETY, VICTIMIZATION, RISK-TAKING, AND FEELINGS OF BELONGING

by

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Abstract

This study examined the social and behavioural experiences of secondary students (grades 8-12), comparing a school-based sample of 151 adolescents identified with mild intellectual disabilities or specific learning disabilities, and a school- grade-, sex-, and ethnically-matched group of adolescents without disabilities in terms of self-reported victimization, bullying, racial discrimination, gender harassment, sexual imposition, feelings of school safety, and belongingness, as well as engagement in high-risk behaviours (alcohol/drug use, violent behaviour). Results of a series of planned contrasts indicated that adolescents with mild intellectual disabilities and specific learning disabilities did not report greater rates of victimization or bullying, nor did they report lower feelings of school safety or belonging, or engagement in high-risk behaviours (i.e., drug use, alcohol use, violent behavior) than their peers without disabilities. As well, adolescents with mild intellectual disabilities and specific learning disabilities did not differ from each other on these indices. Sex differences were also non-significant. Bi-variate correlations generally indicated that the relationships between victimization, bullying, and associated socio-environmental variables such as school safety, engagement in high-risk behaviours, and feelings of belonging did not significantly differ between students with mild intellectual disabilities and students without disabilities, but did for students with specific learning disabilities. Specifically, findings from this study failed to find a significant association between school belonging and victimization, victimization and alcohol use, victimization and violent behaviour, as well as bullying and alcohol use for students with specific learning disabilities. Sex differences among these relationships were also examined, and for the most part were non-significant. However, there were a few exceptions. Namely, the relationship between feelings of school belonging and victimization was significant for boys with specific learning disabilities, but not for girls. Similarly, the relationship between bullying and drug use was higher for boys without disabilities than it was for girls.

Preface

The University of British Columbia's Office of Research Services and Administration's Behavioural Research Ethics Board issued the following Certificate of Approval number for the completion of this research project: B06-0028.

Table of Contents

Abstract	ii
Preface	iii
Table of Contents.....	iv
List of Tables.....	vii
List of Figures.....	viii
Glossary of Terms.....	ix
Acknowledgements.....	x
CHAPTER 1 INTRODUCTION.....	1
The Present Study	3
CHAPTER 2 LITERATURE REVIEW	5
School Violence and Students with Disabilities	9
School Safety.....	9
Victimization.....	11
Class placement	17
Disability status	17
Students' psychosocial characteristics	18
Bullying.....	20
High-Risk Behaviours	23
School Belonging	34
CHAPTER 3 PROBLEM STATEMENT.....	42
Victimization/Bullying and Peer Difficulties	43
Rationale.....	43
Perceptions of Safety.....	45
Rationale.....	46
School Belonging	46

High-Risk Behaviours	47
Rationale	48
Interrelationships among Social Experience Variables	49
Rationale	49
CHAPTER 4 METHODOLOGY	51
Background	51
Participants	52
Procedure	55
Students with special needs	55
Creation of matched samples	58
Measures	58
Demographic characteristics	59
Student outcome variables	59
<i>Adapted Safe School & Social Responsibility Survey for Secondary Students</i>	63
CHAPTER 5 RESULTS	66
Preliminary Analyses	66
Evaluation of matched samples used for comparisons	66
Primary Analyses	70
Victimization	71
Bullying	73
School safety, belonging, and risk behaviours	73
Responses to victimization	77
Victimization and school belonging	83
Victimization and school safety	84
Victimization and high-risk behaviours	85
Bullying and high-risk behaviours	88

CHAPTER 6 DISCUSSION	96
Purpose of the Study	96
Internal Consistency Reliability of Measures	97
Analyses of Mean Group Differences	98
Differences in victimization	98
Differences in perpetration	101
Differences in school safety and belonging	102
Differences in high-risk behaviours	103
Interrelationships among Social Experience Variables	104
Victimization and feelings of belonging.....	104
Victimization and feelings of school safety	105
Victimization and engagement in high-risk behaviours	106
Bullying and engagement in high-risk behaviours	108
Strengths and Limitations of the Study	109
Future Research	111
Conclusions.....	114
REFERENCES.....	117
APPENDIX A DEFINITIONS OF SPECIAL EDUCATION CATEGORIES.....	127
APPENDIX B NEWSLETTER MEMO TO PARENTS	128
APPENDIX C LETTER TO TEACHERS, ADMINISTRATORS, AND COUNSELLORS	129
APPENDIX D PROTOCOL FOR DISTRIBUTING PARENTAL CONSENT FORMS	131
APPENDIX E PARENTAL CONSENT FORM	133
APPENDIX F PROTOCOL FOR SURVEY ADMINISTRATION.....	136
APPENDIX G STUDENT ASSENT FORM.....	143
APPENDIX H ADAPTED STUDENT SURVEY	144

List of Tables

1	Participant Demographic Characteristics.....	54
2	Student Outcome Variables, Internal Consistency Reliabilities and Sample Items.....	60
3	Reliability of Measures Across Groups	65
4	Summary of Preliminary <i>T</i> Test Analyses Evaluating Comparability of Samples.....	67
5	Summary of Planned Contrasts Comparing Students with Mild Intellectual Disabilities (MID), Specific Learning Disabilities (SLD), and Matched Comparisons on Indices of Victimization, Bullying, Perpetration, School Safety, Belonging, and Risk Behaviour	75
6	Means and Standard Deviations for Students with Mild Intellectual Disabilities (MID), Specific Learning Disabilities (SLD), and Matched Samples on Student Outcome Variables	76
7	Means and Standard Deviations for Students with Mild Intellectual Disabilities (MID), Specific Learning Disabilities (SLD), and Matched Samples on Responses to Victimization	81
8	Intercorrelations between Indices for Students with Mild Intellectual Disabilities (MID), Students with Specific Learning Disabilities (SLD), and Matched Controls.....	92

List of Figures

- 1 Mean total scores of students with and without Mild Intellectual Disabilities (MID) on “reported it to staff” strategy use 79
- 2 Mean total scores of students with Mild Intellectual Disabilities (MID), MID matches, and students with Specific Learning Disabilities (SLD) on “friends took revenge” strategy use 80

Glossary of Terms

Bullying/harassment: Happens when a person (or persons) who has (have) more power or some advantage (bigger, more status, etc.) tries to bother, hurt, make fun of or attack another person (i.e., it's not an accident), and does so repeatedly.

High-risk behaviours: "Actions that put individuals at increased risk for premature morbidity or mortality" (Pack, Wallander, & Browne, 1998, p. 409).

MID: Mild Intellectual Disabilities

Physical bullying: Includes hitting, shoving, and kicking.

Racial discrimination: When people are seen as having different value and/or treated unfairly because of their racial or ethnic background, culture, the colour of their skin, or other differences. Examples include jokes about race/culture and being excluded because of race/culture.

School belonging: Sense of "psychological membership in the school or classroom; ...the extent to which students feel personally accepted, respected, included, and supported by others in the school environment" (Goodenow, 1993, p. 80).

Sexual harassment: Unwelcome and unwanted behaviour about sex and gender that interferes with your life and makes you feel uncomfortable, even if the people doing the harassing are only joking. These are not behaviours you like or want.

Sexual Imposition: Includes unwanted touching, kissing, grabbing, pinching, forcing and/or threatening to do something sexual when unwanted.

SLD: Specific Learning Disabilities

Social bullying: Includes exclusion, rumours, gossip, and humiliation.

Verbal bullying: Includes name calling, teasing, threats, and putdowns.

Violent behaviour: Includes engagement in physical or verbal violence (e.g., pushing, slapping or hitting), weapon carrying, and stealing/purposefully damaging property.

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CHAPTER 1 INTRODUCTION

A growing body of research demonstrates the importance of social-emotional and interpersonal aspects of schooling as a critical foundation for academic success, adequate relationships, and mental health (Durlak, Weissberg, Dymnick, Taylor & Schellinger, 2011; Greenberg et al., 2003; Hymel, Schonert-Reichl & Miller, 2006; Morrison & Furlong, 1994; Zins, Bloodworth, Weissberg, & Walberg, 2004a). The extant research clearly shows that the long-term outcomes associated with inadequate social-emotional competence are serious and far-reaching. Specifically, inadequate social-emotional competence has been associated with academic, social and emotional adjustment difficulties during adolescence and adulthood (Merrell, Merz, Johnson & Ring, 1992). Research has also shown that children who are socially rejected by their schoolmates are at risk for academic and mental health difficulties (McDougall, Hymel, Vaillancourt & Mercer, 2001; Parker & Asher, 1987). Relatedly, there are increasing concerns about negative interpersonal behaviour among students in schools. Despite evidence that youth violent crime has declined (Leschied, Cummings, Van Brunshot, Cunningham & Saunders, 2001; Nelson, 2000), public concern with respect to youth violence and school safety is on the rise and without precedence in Canada and abroad (Gabor, 1999; Nelson, 2000). This perception of increasing violence and concerns about the relative safety of students on and off school campuses stems in large part to intense media coverage of high profile, sensationalized portrayals of school shootings, teen suicides, and other student-on-student attacks (Marr & Field, 2001; Morrison & Furlong, 1994; Nelson, 2000), creating a climate of alarm that has resulted in school discipline and school safety issues becoming the focus of increased research and public attention (Nelson, 2000; Skiba, 2000; Swearer & Doll, 2001).

Of additional concern are reports of increased youth engagement in high-risk behaviours such as substance abuse, early sexual behaviour, and weapon carrying.

Results of a 1993 national U.S. youth risk behaviour survey conducted in schools across 43

states indicated that 11.8% of students reported carrying a weapon and 16.2% of students reported participating in a physical fight at school in the past month (CDC; Kann et al., 1995). Results of similar school surveys reveal that almost half of secondary school students report weapons and about 40% report gangs in their schools (Cornell & Loper, 1998). Closer to home, the McCreary Centre Society (MCS) has conducted extensive surveys of youth in British Columbia showing that a significant proportion of BC youth engage in a variety of inter-related high-risk behaviours such as smoking, frequent use of marijuana (30%), alcohol (54%), other illegal substances (ranging from 4% for cocaine to 15% for prescription drugs), as well as binge drinking (44%). Moreover, results have also linked engagement in these high-risk behaviours to experiences of physical and/or sexual abuse, severe emotional distress, serious consideration of and/or attempted suicide, running away from home, significantly lower feelings of connectedness to their families and schools, and significantly lower post-secondary educational goals than youth who do not engage in such high-risk behaviours (Smith, Stewart, Peled, Poon, Sawyer, and McCreary Centre Society, 2009).

Given the importance of social-emotional competence and learning for academic success, positive peer relationships and student's mental health, as well as increasing concerns about school violence and youth engagement in high-risk behaviours, many schools have responded by creating mandates for safe schools (Morrison & Furlong, 1994). In British Columbia schools in 2001, for example, the Ministry of Education identified social responsibility as a "foundational skill", as important as reading, writing, and arithmetic (<http://www.bced.gov.bc.ca/policy/policies/diversity.htm>). Schools are being held accountable for their efforts to address the negative interpersonal interactions that may occur among their students. With this accountability has come a substantial increase in research that has tracked student's social experiences at school. The importance of tracking this information is clear, but a complete understanding of student experiences

requires consideration of youth with special educational needs, a population that is often overlooked in such evaluations. The vast majority of research studies have focused almost exclusively on students without disabilities. As demonstrated in the literature review to follow, far less is known about the social experiences of students with intellectual and learning disabilities. Current research suggests that these individuals are likely to be over-represented as victims of interpersonal harassment (e.g., Marini, Fairbairn, & Zuber, 2001), to be more likely to engage in high-risk behaviours, and to be more susceptible to the risks associated with these behaviours (e.g., Lamorey & Leigh, 1996).

The purpose of this study was to extend current research on school safety and social experiences in typical student populations to adolescents with mild intellectual and specific learning disabilities attending inclusive schools by examining their feelings of safety and belonging at school, the extent to which they experienced and engaged in a wide range of interpersonal victimization and/or harassment and discrimination, how they responded to incidents of victimization (both as victims and witnesses), and their engagement in various forms of high-risk behaviours, and variations in these experiences relative to each other and their same-age peers without disabilities. A secondary purpose of this study was to examine the relationships between the aforementioned social experience variables and compare the strength of these associations for adolescents with mild intellectual disabilities, adolescents with specific learning disabilities, and their peers without disabilities.

The Present Study

To better understand the social experiences of adolescents in secondary schools, an urban school district in south-western BC developed an extensive student survey that provided baseline information about the experiences that students currently face in their secondary schools. "Increasing one's awareness of the scope and nature of the problem", according to Morrison and Furlong (1994, p.253), "is the first step in preparing to play a role in school safety." Although informative about the experiences of students within the

general population, school surveys examining the aforementioned issues are seldom administered to students with special educational needs, owing primarily to the difficulty of appropriately modifying such surveys for students with specific learning and cognitive difficulties, as well as the time consuming nature of the testing required (e.g., individual or small group testing, increased time for administration, etc.). The purpose of the present study was to extend this district-wide survey to two distinct groups of students with special needs -- those identified with mild intellectual disabilities and those identified with specific learning disabilities, with each group compared to a matched subsample of students without disabilities of the same sex, grade and school (and, where possible, race/ethnicity).

By comparing the social experiences of adolescents with intellectual and learning disabilities to those of students without disabilities, we may enhance our understanding and our efforts to address problems of school violence, school safety, and social responsibility and, in turn, promote positive system-wide change by informing prevention efforts that benefit *all* students in our school system, not just students without disabilities. In this regard, the present study was designed to replicate and extend previous research on the social experiences of students with intellectual and learning disabilities by examining variations as a function of disability and sex across a broad range of social experiences. Although previous research has examined variations in reported bullying and victimization, the present study also considers variations in reported racial discrimination, gender harassment, and sexual imposition, as well as student reports of how they respond to such peer harassment, both as victims and as witnesses, their engagement in high-risk behaviours, and their feelings of belonging at school.

CHAPTER 2 LITERATURE REVIEW

The promotion of social-emotional learning (SEL), as reflected in efforts to enhance students' social-emotional competence, character, health, and civic engagement, and improve the quality of the learning environments in which students are educated, is no longer seen as "separate" or even parallel to the academic mission of schools; rather, it is seen as essential (Durlak et al., 2011; Greenberg et al., 2003; Utne O'Brien, Weissberg, & Munro, 2005/2006; Zins et al., 2004a; www.casel.org). "The two kinds of learning are intimately connected. That means that promoting students' social and emotional skills plays a critical role in improving their academic performance." (Utne O'Brien et al., 2005/2006, p. 1).

An impressive and growing body of evidence has documented the conceptual and empirical connections between social-emotional competence and learning and improved school attitudes, behaviour, and performance (Durlak et al., 2011; Greenberg et al., 2003; Zins et al., 2004a), at least among students without disabilities. Specifically, social-emotional programming has been solidly linked with school success (i.e., increased effort and better academic performance), life-long learning, and associated outcomes such as decreased school drop-out, non-attendance and delinquency, other conduct problems, reductions in high-risk behaviours such as drug and alcohol use, special education referrals, and school violence, as well as increases in supportive relationships and classrooms and school climates that foster compassion, inclusion, and respect (Durlak et al., 2011; Elias, 2006; Ragozzino, Resnik, Utne O'Brien, & Weissberg, 2003; Zins et al., 2004a, Zins, Wahlberg, & Weissberg., 2004b). These positive outcomes are seen to serve both as protective factors that decrease problem behaviours and as foundations for healthy development (Greenberg et al., 2003). Consistent with these findings, social and emotional learning programs and prevention efforts have been found to have direct as well as indirect impacts on student learning and school success – directly by creating safe and caring

learning environments and by providing social and emotional programming that includes instruction in self- and social-awareness, self-management, relationships skills, and responsible decision-making, and indirectly through higher levels of attachment to school, and lower levels of engagement in high-risk behaviours (CASEL, 2003).

Findings from recent research highlight the conceptual and empirical links between social-emotional learning, school success, *and* social-emotional adjustment. For example, a recent meta-analysis of 165 studies of school-based prevention activities showed that environmentally-focused SEL interventions significantly decreased the prevalence of delinquency, alcohol and drug use, non-attendance, school dropout, and conduct problems (Wilson, Gottfredson, & Najaka, 2001). As well, in a five-year longitudinal study, Fonagy and Twemlow and colleagues (Twemlow, Fonagy, Sacco, Gies, Evans, & Ewbank, 2001; Fonagy, Twemlow, Vernberg, Sacco, & Little, 2005) evaluated the impact of the Peaceful Schools Project, a social-systems/psychodynamic, anti-violence program implemented in elementary schools in in Topeka, Kansas. Comparing the learning climates of experimental versus control schools that were matched on demographic variables, they found that schools implementing the program experienced significant reductions in disciplinary referrals and suspension rates, significant increases in standardized achievement tests scores (school-wide and for individual students), and increased student ratings of school safety, while control group schools and students did not. Students in experimental schools made notable gains regardless of socio-economic or cultural background. Furthermore, students who transferred out of experimental schools showed signs of decline in academic achievement that was not simply attributable to changing schools.

Most recently, Durlak and colleagues (2011) conducted a meta-analysis of over 300 studies that clearly indicated that social and emotional learning programs significantly improve students' academic performance. Indeed, results of their study showed that an average student receiving social and emotional programming ranked at least 10 percentage

points higher on achievement tests than students who did not receive such programming (as cited in Utne O'Brien et al., 2005/2006). Moreover, a meta-analysis of 177 studies of school-based primary prevention programs designed to address behavioural and social problems, provided evidence that SEL programming had the dual benefits of enhancing competencies *and* reducing both internalising and externalising symptoms, producing outcomes similar to or better than many other treatment programs (Durlak & Wells, 1997, as cited in Greenberg et al., 2003).

Looking at the other side of the coin, a growing body of research points to the costs of school violence, demonstrating that repeated victimization by peers has detrimental effects on a child's academic, emotional and social development, as well as their physical health (Batsche & Knoff, 1994; Card, Isaacs, & Hodges, 2007; Hawker & Boulton, 2000; Hoover, Oliver, & Thompson, 1993; Olweus, 1993). Specifically, children who were victimized by peers were found to exhibit higher levels of anxiety and depression, inhibition, concentration problems, and lower self-confidence and self-esteem than non-victims (Besag, 1989; Crick & Bigbee, 1998; Crothers & Levinson, 2004; Mishna, 2003; Olweus, 1993; Slee & Rigby, 1993, Boivin, Hymel, & Hodges, 2001). Detrimental effects that are sustained into adulthood include depression and depressive tendencies, poorer self-concept and self-esteem, as well as difficulty in initiating and maintaining friendships with the opposite sex (Crothers & Levinson, 2004; Olweus, 1993; Ozer & Weinstein, 2004; Swearer & Doll, 2001). In addition, victims of school violence may also develop externalising symptoms and disorders (Ozer & Weinstein, 2004; Swearer & Doll, 2001), negative attitudes toward their teachers (Harris et al., 1994), and may be more likely to report less peer and adult support and lower feelings of belongingness at school (Furlong, Chung, Bates & Morrison, 1995). Perhaps as a result, victims of school violence have also been shown to engage in higher levels of school avoidance/non-attendance (Crothers &

Levinson, 2004); and children who are rejected by their classmates tend to drop out of school completely (Hymel, Comfort, Schonert-Reichl, & McDougall, 1996).

The long-term impact of school violence and poor interpersonal relations at school is sobering. However, these detrimental effects are not limited to victims, but also extend to perpetrators and to students who witness such interpersonal violence (Janson, 2000; Mishna, 2003). For example, research on school bullying has indicated that students who bully others are at increased risk for developing maladaptive social skills that predict poor adult adjustment, and are more likely to engage in domestic violence, criminality, and substance abuse in adulthood (Crothers & Levinson, 2004; Olweus, 1993). In a longitudinal follow-up study of young adult males, Olweus (1993) found that boys who had been rated as bullies by their teachers and classmates in grades 6 to 9, were more likely to engage in other antisocial/delinquent behaviours such as vandalism, shoplifting, truancy, and frequent drug use, and that this behavioural pattern often continued into young adulthood. In fact, 60% of these male students had been convicted of at least one serious crime by the age of 24, as compared to 23% of male students who had not been characterized as bullies. Moreover, 35 to 40% of former bullies had 3 or more convictions by this age, as compared to 10% of male students who were *not* rated as bullies in grades 6 to 9.

Certainly, the positive, and lasting impact of social-emotional learning, as well as the sobering, long-term, impact of school violence and poor interpersonal relations on academic and psychological outcomes at school are evident – at least when examining research conducted with adolescents in the general population. Unfortunately, there is a dearth of similar research conducted with special populations. Yet, it is students in these very populations who tend to require intense academic and social support, show an increased prevalence of negative psychological outcomes, and are seen as more susceptible to peer victimization. Research examining the impact of school violence and interpersonal harassment on children with special needs is the focus of the remainder of this chapter.

School Violence and Students with Disabilities

School violence is not a recent phenomenon (Olweus, 1978). In fact, violence in schools has been historically documented for over a century (Morrison, Furlong, & Smith, 1994). Only within the past three decades, however, has it received widespread concern and research attention in the general population. Research investigating this issue in students with disabilities, however, has received even less attention, with few studies published on issues directly related to school safety/violence and social responsibility among students with various disabilities (Mishna, 2003; Morrison et al., 1994; Sheard, Clegg, Standen, & Cromby, 2001). Moreover, as will be demonstrated later in the chapter, much of this literature is hampered with methodological flaws such as lack of comparison groups, small sample sizes (i.e., $n < 20$); and lack of definitional clarity on participants' disability status (e.g., "moderate learning difficulties", "students receiving special educational services"). As well, existing studies have primarily focused on one type of victimization -- bullying -- and has not considered other forms of peer harassment, such as racial discrimination, gender harassment, and sexual imposition. Additionally, very few empirical studies exist which examine risk-taking behaviours and feelings of belonging in special populations. In the paragraphs that follow, the research conducted to date on the social experiences of students with mild intellectual disabilities and specific learning disabilities is considered as a foundation to the present study.

School Safety

School safety is a "basic need that must be met in order for students to achieve appropriate learning and performance outcomes...and [safe environments] enhance creativity, cooperative behaviour, affiliative behaviour, exploration and risk-taking" (Morrison & Furlong, 1994, p. 3). Longitudinal research has shown that students in the general population who report feeling physically and emotionally safe at school demonstrate better

educational *and* psychological outcomes (National Center for Educational Statistics, 1997; Twemlow, Fonagy, & Sacco, 2001).

With the exception of one study by Morrison, Furlong, and Smith (1994), previous research to date has not examined variations in feelings of safety among students with special needs, as compared with students in general education. If, as suggested by some researchers (see subsequent section on victimization) that students with special needs are more likely to experience victimization by peers, it would be expected that they would also report feeling less safe. However, Morrison et al. did not find this to be the case. Specifically, the researchers conducted a study on 554 U.S. secondary students, including a random sample of general education students ($n=485$), all (general education) students enrolled in an elective “leadership” class ($n=39$), students enrolled in a segregated class for students with severe learning disabilities ($n=19$), and students enrolled in a half-day, self-contained “behaviour” class ($n=11$), in an effort to tap their personal experiences of violence and perceptions of school safety.

Results of the study indicated that, whereas students with learning disabilities reported a higher level of personal victimization than the other three groups, students in the behaviour and leadership classes reported significantly more personal experiences of school violence than the other two groups of students. In fact, students with learning disabilities, perhaps owing to the protective function of their segregated classroom (as hypothesized by the study’s authors), reported the lowest rates for observing school violence. Additionally, unlike the other three groups of students, whose personal experiences of violence decreased feelings of school safety, students with learning disabilities did not evidence this dynamic. As Morrison et al. correctly point out, further research is warranted to clarify the relationships between experiences of violence, perceptions of school safety, and other factors such as social support systems. In the present study, student reports of feelings of safety at school were compared across

matched samples of students with intellectual disabilities, students with learning disabilities and those in the general population.

Victimization

Although the body of literature examining bullying and victimization among students with disabilities remains small, a general conclusion has been reached, namely, that students with disabilities are over-represented as victims of bullying (Marini et al., 2001). Specifically, depending on participant age and the research methodology employed, students with disabilities have been reported to be at least two to three times more likely to report being bullied, especially on a frequent basis, than their general education peers (Kaukiainen et al., 2002; Knox & Conti-Ramsden, 2003; Marini et al., 2001, Morrison & Furlong, 1994, Sheard et al., 2001; Whitney, Nabuzoka, & Smith, 1992; Thompson, Whitney & Smith, 1994). Studies of victimization in special populations have specifically focused on bullying victimization, which occurs when a student is “exposed, repeatedly and over time, to negative actions on the part of one or more other students” (Olweus, 1993, p. 9).

In one of the earliest published studies on bullying among students with special needs, O'Moore and Hillery (1989) examined the nature and incidence of bullying in a population of 783 students, aged 7-13 years, in Dublin, Ireland. The sample included 109 students with disabilities attending remedial classes, 35 students with disabilities attending special schools, and 639 general education students. Results indicated that students with disabilities reported higher rates of bullying than their peers without disabilities. Specifically, approximately 68% of students attending remedial classes reported that they had been bullied at school, whereas just over 62% of general education students reported being bullied. Students attending special schools were more even more likely to report being victimized, with over 77% reporting that they were victims of frequent school bullying (e.g., once a week or more). Findings from this study also indicated that 17.5% of the

students in remedial classes and 14.3% students attending special schools reported being bullied at a frequent rate. These figures were twice as high as those reported by their general education peers (i.e., 7%).

Although O'Moore and Hillery (1989) were among the first to investigate victimization in students with special needs, there are several concerns that limit the potential generalizability of their results. First, the researchers do not define or operationalize their categorization of students with a "mild learning disability", making it difficult to determine whether findings from this study can be generalized to all students with disabilities or students with high-incidence disabilities in particular. Second, it is not clear whether these findings, obtained with pre-adolescents, would extend to adolescents with disabilities within the larger context of secondary schools. Third, the sample of students with disabilities considered were primarily those enrolled in remedial classes or special schools. Accordingly, it is not clear whether the higher rates of victimization reported by students with special needs reflect the poor interpersonal skills of students within special needs classes or poor treatment of students with special needs by students within the inclusive classrooms.

In the U.K., Whitney, Smith, and Thompson (1994) investigated self-reported rates of victimization among several groups of students with disabilities enrolled in inclusive classrooms (ages 8-16 years), including 22 students with "mild learning difficulties," 45 students with "moderate learning difficulties", 6 students with physical disabilities, 6 students with hearing impairments, and 14 students with visual impairments and a sample of 93 students without disabilities, matched on the basis of age, sex, ethnicity, and school. In total, 67% of students with disabilities reported being victimized by others (frequency not specified), as compared with only 25% of students in the general education comparison group. Among the students with disabilities, 55% of students with "mild learning difficulties" reported being bullied, as compared with 78% of students with "moderate learning

difficulties". Although results of this study indicate greater victimization among students with learning difficulties, there are several limitations of the study that must be considered. In addition to the small sample size, details regarding how these students were classified were not provided, making it difficult to generalize findings to other groups of students with disabilities. Nevertheless, the results reported suggest that students who are enrolled in inclusive classrooms may be at greater risk of peer victimization than their peers in the general education population.

More recently, in a large *N* study, Rose, Espelage, and Monda-Amaya (2009) found that middle school and high school students in special education ($n=2,519$) reported higher rates of victimization (as well as bullying and fighting behaviour) than their peers without disabilities ($n=19,127$). Students with disabilities were also asked to report on whether they were receiving no, part-time, or full-time special education support. As hypothesized, students with disabilities who were enrolled in self-contained classrooms ($n=896$) reported significantly higher rates of victimization than did students with disabilities in inclusive settings ($n=1,623$), consistent with results reported by O'Moore and Hillery (1989). Importantly, it was primarily students with disabilities in segregated classes that reported greater victimization, as opposed to those in more inclusive contexts. Unfortunately, this study combined all students with varying disabilities into a single group, making it difficult to ascertain whether particular disabilities made children more vulnerable to peer bullying. Of additional concern is the fact that students with disabilities self-identified whether they received no, part-time or full-time remedial assistance. Finally, the comparison group of students without disabilities was not matched to students with disabilities, making it difficult to ascertain whether other factors impacted the study's results.

Taken together, the three studies to date examining self-reports of peer victimization among students with special needs have indicated higher rates of victimization as compared with students without disabilities. However, results of two of the three studies

(O'Moore & Hillery, 1989; Rose et al., 2009) indicated that students in self-contained classes reported a higher level of victimization than students in inclusive settings, making it difficult to determine whether or not students with disabilities are at greater, lesser, or equal risk for victimization when integrated into inclusive educational settings than their peers without disabilities. This limited database certainly points to the necessity of further research that compares the victimization rates of students with disabilities who are enrolled in inclusive vs. self-contained classes.

Additionally, the studies reviewed thus far have lacked clarity regarding the operational definitions of the disability groups they are studying (e.g., "mild" vs. "moderate" learning difficulty). This lack of clarity poses a difficulty when trying to compare the results of studies examining victimization rates in students with special needs. As Rose et al. (2009) point out, distinct inclusionary criteria for particular categories of students with disabilities is an important factor to consider in future research. Moreover, the aforementioned studies have combined students with a range of disabilities into a single group, making it difficult to evaluate variations as a function of the nature of students' special needs. For example, Dawkins (1996) found that students with more observable disability characteristics reported significantly higher levels of victimization than did other subgroups of students with less observable disabilities. However, students with more observable (or perhaps students with "low-incidence") disabilities are not the focus of this study or literature review. Of interest in the present study is whether students diagnosed with a specific learning disability (LD) or identified with a mild intellectual disability (MID), both of which would be considered "high-incidence" or less observable disabilities, are equally vulnerable to peer victimization.

Three studies to date have explored peer victimization among students diagnosed with specific learning disabilities. In an urban, U.S. sample, Sabornie (1994) compared the social experiences of 38 middle school students with learning disabilities attending self-

contained resource rooms, with those of a grade-, sex-, ethnicity-, and classroom-matched group of students without learning disabilities. Students were asked questions about whether any of their belongings had been stolen at school and whether they had been physically bullied at school that year. Consistent with findings of the studies reviewed thus far regarding students with disabilities in segregated classrooms (O'Moore & Hillery, 1989; Rose et al., 2009), students with learning disabilities in self-contained resource rooms reported significantly more verbal and physical victimization, as well as more stolen belongings than students without disabilities.

In a recent Canadian study, McNamara, Vervaeke, and Willoughby (2008) compared adolescents with learning disabilities ($n=230$) with adolescents with comorbid learning disabilities and attention-deficit/hyperactivity disorder (AD/HD, $n=92$), with a sample of adolescents without learning disabilities or AD/HD ($n=322$), matched on the basis of age, sex, and parent education. Findings indicated that students with both learning disabilities and AD/HD reported the highest levels of direct and indirect victimization, which was significantly greater than the levels reported by both adolescents with and without learning disabilities (but not AD/HD). In turn, students with learning disabilities reported significantly greater levels of direct and indirect victimization than did adolescents with neither learning disabilities nor AD/HD. One methodological limitation of this study is the researchers' reliance on students' self-identification of "learning disability". It is entirely possible that a wide range of students with special needs, not just students with learning disabilities, self-identified as having a learning disability.

In contrast, Kaukiainen and colleagues (2002) did not find students with learning disabilities to report greater victimization than students without disabilities. Specifically, in a school-based study of middle school students, they compared Finnish, fifth-grade students with ($n=28$) and without ($n=111$) learning disabilities in terms of self-reports of self-concept, and peer assessments of social intelligence, bullying and victimization. Results indicated

that students with learning disabilities were rated by their peers as significantly lower on social skills and significantly higher on bullying behaviour relative to students without learning disabilities. Peer-rated victimization, however, was not found to be higher among students with learning disabilities compared to their classmates without disabilities. Given the small sample of students with learning disabilities considered ($n=28$) and the limited information provided regarding the classrooms or students considered, the generalizability of these findings is uncertain. Nevertheless, they do raise questions about whether students with learning disabilities in inclusive classrooms are at greater risk for peer victimization, in contrast to findings reported by Sabornie (1994) and McNamara et al. (2008).

Only three studies have examined victimization in individuals with intellectual disabilities and all of these have been conducted with adults, not children or youth - one with 17 adults with developmental disabilities (Marini et al., 2001), one with 459 adults with mild or moderate intellectual disabilities (Bramston, Fogarty & Cummings, 1999), and one with 54 adults with severe intellectual disabilities (Sheard et al., 2001). Across the three studies, self-reported victimization rates ranged from 21% (Sheard et al., 2001) to 37% (Bramston et al., 1999). None of these three studies, however, included a comparison group, so it is difficult to ascertain whether these rates significantly differed from those in the general population. Moreover, it is difficult to determine whether adult prevalence rates would generalize to a school-based sample of adolescents with intellectual disabilities.

Cummings, Pepler, Mishna and Craig (2006) rightly lament the paucity of data regarding bullying and victimization among children and youth with intellectual disabilities. While students with mild intellectual disabilities are included in the category of “high-incidence” disabilities, due to limited empirical research, it is not known whether they evidence a similar level and/or nature of victimization as students with other disabilities, or their peers without disabilities. Accordingly, a much-needed focus in future research is the

examination of bullying and other forms of victimization in an adolescent sample of students with and without intellectual disabilities. This was one focus of the present study.

Why are students with disabilities seen to be at greater risk for victimization? Rose (2011) points out that “the distinction between students with and without disabilities, in reality, is more complex than a simple dichotomous approach.” (p. 36). Rose proposed three different factors which might account for the discrepancy in prevalence rates observed between special needs and general education students in studies to date: (1) class placement (i.e., inclusive classrooms vs. segregated setting), (2) the severity and/or observeability of the disability, and (3) specific disability (i.e., psycho-social) characteristics. Each is considered in turn below.

Class placement. Several studies have documented that students with moderate to severe disabilities attending school in segregated settings (e.g., special schools or self-contained classrooms) are victimized significantly more, according to self-report, as well as peer and teacher identification, than those educated in more inclusive settings (Kaukiainen et al., 2002; Martlew & Hodson, 1991; Morrison et al., 1994; O’Moore & Hillery, 1989; Rose et al., 2009; Sabornie, 1994). For example, students and teachers consistently identify students with disabilities as frequent victims of bullying (e.g., Nabuzoka & Smith, 1993; Sabornie, 1994). However, when consideration is given to class placement, rates of victimization are often seen to vary between students in inclusive settings and students in more restrictive placements. Rose, Monda-Amaya, & Espelage, (2010) hypothesized that these differences in victimization rates could be attributable to educational practices, classroom structure, and/or, as we will next explore, the severity of the disability.

Disability status. Rose et al. (2010) further suggest that it may be a student’s disability status (i.e., severity and/or type of disability) and/or their actual class placement that puts students with disabilities at greater risk for victimization. For example, Whitney et al. (1994) noted that “just being different in a noticeable way” puts a person at risk for

victimization (p. 213). Findings from Whitney et al.'s study showed that students with observable disabilities (e.g., physical disabilities and hearing impairments) were 2-4 times more likely to report being victimized than their classmates without disabilities, whereas students with mild to moderate learning difficulties were 2-3 times more likely to report being victimized. Similarly, Dawkins (1996) reported that adolescents with unobservable disabilities (i.e., conditions not affecting their appearance or gait) reported victimization rates similar to the national U.S. average; whereas adolescents with observable disabilities (e.g., conditions affecting their appearance or gait) reported significantly higher victimization rates.

Students' psychosocial characteristics. In her review of the research assessing social functioning, bullying, and victimization patterns in children with learning disabilities, Mishna (2003) found that, compared to students without learning disabilities, students with learning disabilities were (1) less socially skilled, (2) less cooperative, (3) shyer, and (4) had fewer friends. Similarly, research has demonstrated that victims of bullying commonly demonstrate ineffective social skills, poor interpersonal skills and lower academic competence, are less popular, receive lower social acceptance ratings, have low self-esteem, are shy, have difficulty relating to peers, are more socially isolated, are in poorer physical health than non-victims, and are regarded as unpopular and have fewer school friends, thereby placing them at greater risk (i.e., lack a social protection base) (Boivin et al., 2001; Furlong, et al., 1995; Flynt & Collins Morton, 2004; Hazler, Carney, Green, Powell & Jolly., 1997; Martlew & Hodson, 1991; Nabuzoka & Smith, 1993; Slee, 1994; Thompson et al., 1994; Whitney et al., 1994; Wiener, 2003; Ziegler & Pepler, 1993). This lack of social networks also fuels the cycle of missed opportunities to practice social skills (Rose et al., 2010).

As a case in point, Whitney and Smith (1993, study reviewed earlier) hypothesized a link between learning difficulties, emotional problems, poor social skills, and victimization.

Specifically, they found correlations among these disability characteristics which they theorized made students with disabilities more vulnerable to experiencing bullying in school than general education students. Results from their study indicated that students who spent playtime alone or who had fewer friends were at particular risk. Whitney and Smith suggested that a lack of protective peer relationships may represent an additional contributing factor to the reason why students with disabilities are more vulnerable to bullies (also see Boivin et al., 2001; Martlew & Hodson, 1991; Pepler & Craig, 1995). They also suggested that general education students interpret such differences between themselves and students receiving special education services (e.g., number of friends, quality of social integration) as “weaknesses”.

Martlew and Hodson (1991) also compared the peer relationships and victimization among children with and without learning disabilities. Analyses of playground observations and student interviews indicated that children with learning disabilities reported fewer friends and were observed to be teased significantly more on the playground than their matched controls. In another study that examined peer relationships and status of children with learning disabilities, Nabuzoka and Smith (1993) asked 36 students with learning disabilities and 143 students without learning disabilities in an integrated classroom to identify classmates they believed best fit the descriptors such as “bully”, “victim”, “cooperates”, “disrupts”, “shy”, “fights”, “seeks help” and “leader”. Findings from their study indicated that children with learning disabilities were significantly more likely than their controls to be identified as victims (especially girls). Out of six students that were described as both bully and victim, four had a learning disability. None of the students with a learning disability were seen as cooperative, but they were significantly more likely to be described as requesting help. Students with learning disabilities that were identified as shy and needing help were more likely to be victims of bullying. This association did not hold true for students without learning disabilities.

Researchers examining bullying and victimization in students with intellectual disabilities similarly posit that psycho-social characteristics such as low self-esteem, a tendency to look to others for cues or guidance, less assertive behaviour, and poor self-control, combined with the social information processing difficulties associated with developmental disabilities, can hinder attempts to evaluate high-risk social situations, to make appropriate judgments about the emotions, behaviours, and intentions of others, or to ask for support and/or protection, thereby increasing their susceptibility to exploitation by others (Flynt & Collins Morton, 2004; Lamorey & Leigh, 1996; Sheard et al., 2001). In addition, some students with intellectual disabilities are more likely to have motor skill deficits, and physical and health impairments that make them easier targets for bullies (Flynt & Collins Morton, 2004).

In summary, a review of the victimization rates of students with disabilities indicates a consistent trend. Specifically, with the exception of Kaukianen et al.'s (2002) study, empirical research shows that students with disabilities report a higher rate of victimization than students without disabilities. However, a careful review of the literature suggests that the variation observed in reported prevalence rates between students with and without disabilities appears to be in large part attributable to students' level of inclusion into classroom and school setting and/or the "observeability" or type of their disability. Moreover, it is not clear whether reported rates of victimization vary across different types of disabilities. Of interest in the present study was whether students with two different types of high-incidence disabilities -- those diagnosed with specific learning disabilities and those identified with mild intellectual disabilities -- who attend inclusive schools are at greater risk for peer victimization.

Bullying

Although a few studies (reviewed above) have demonstrated that students with disabilities are more likely to be victimized than students without disabilities, of additional

interest is whether students with disabilities are also more likely to victimize others. Indeed, they may be victims, bullies, or both. For example, some researchers (e.g., O'Moore & Hillery, 1989; Rose, 2011) suggest that higher victimization rates among students with disabilities may lead to increased perpetration rates, as victimized students develop aggressive characteristics to combat victimization. Cullinan (2002) further suggests that if students with disabilities have a tendency toward aggressive, anti-social behaviour, they may be particularly likely to bully others. Indeed, there is some recent evidence showing that students with learning disabilities are more aggressive than their peers without disabilities (e.g., Kaukiainen et al., 2002; Rose et al., 2010).

Consistent with these arguments, a few studies have investigated whether students with disabilities are more likely than their peers without disabilities to be both victims *and* perpetrators of bullying (see Rose et al., 2009 for a review), with suggestions that students with high-incidence disabilities (e.g., learning disabilities, emotionally/behavioural disorders) are identified as bullies twice as often as students without disabilities (Rose et al., 2009; Woods & Wolke, 2004). A closer examination of these studies follows.

Whitney et al. (1994, described earlier) compared self-reported bullying rates across several groups of British students with disabilities (i.e., 22 students with mild learning difficulties, 45 students with moderate learning difficulties, 6 students with physical disabilities, 6 students with hearing impairments, and 14 students with visual impairments) and 93 demographically-matched students without disabilities. In total, 33% of students with disabilities reported that they bullied others, as compared with only 17% of the students without disabilities. Among students with "mild learning difficulties", 27% reported bullying others; among students with "moderate learning difficulties" 29% reported bullying others.

Similarly, O'Moore and Hillery (1989, described earlier) examined bullying among 783 Irish students (aged 7-13 years) and found that 68.6% of students attending special schools ($n=35$) and 43% of students attending remedial classes in inclusive schools

($n=109$), reported that they bullied others. In comparison, 42% of general education students ($n=639$) reported bullying others.

More recently, and considering a much larger sample of students with special needs, Rose et al. (2009, described earlier) found that middle school and high school students with disabilities ($n=2,519$) reported higher rates of bullying and fighting behaviour than their peers without disabilities ($n=19,127$). Moreover, and consistent with findings reported by O'Moore and Hillery (1989), results indicated that students with disabilities enrolled in inclusive classrooms reported engaging in less bullying than students enrolled in self-contained classrooms. Interestingly, results also indicated that self-reported fighting perpetration rates decreased with age for students without disabilities, but remained stable across age for students with disabilities. Unfortunately, this study combined all students with varying disabilities into a single group and relied on student self-reports of whether they received, no, part-time or full-time special education support, with no verification of the accuracy of their self-assessments. Nevertheless, all three studies indicate higher self-reported rates of bullying among students with disabilities, especially among those in segregated classrooms, as compared with those included in the general school population.

In addition to self-reported bullying, peers may also view students with disabilities as engaging in more bullying. In a small Scandinavian study conducted by Kaukiainen and his colleagues (2002, described earlier), over 21% of the 28 Finnish 5th graders with learning disabilities in inclusive schools were nominated by peers as bullies (significantly more than would be expected by chance), as compared to just over 6% of a control group ($n=111$). Although the sample of students with learning disabilities was small, and the researchers' operational definition of "learning disability" very limited (i.e., students who were in the bottom 20% on a composite measure of reading and writing), results of this study demonstrate that peers perceive a significant minority of students with learning disabilities to engage in bullying.

To summarize, the four studies to date that have investigated bullying perpetration rates among students with disabilities reveal a general trend: namely, that students with disabilities, depending on disability type and/or classroom setting, evidence a perpetration rate that is equal to or higher than that evidenced by their peers without disabilities. Extending this research, and addressing some of the methodological limitations inherent in previous studies, the present study explores self-reported bullying among secondary students formally identified by their inclusive schools as having either specific learning disabilities or mild intellectual disabilities, as compared with a matched sample of peers without disabilities. Further, as studies to date have focused specifically on bullying behaviour, the present study expands this area of research by examining bullying as well as other forms of perpetration committed by adolescents with disabilities, including racial discrimination, gender harassment, and sexual imposition.

High-Risk Behaviours

High-risk or health-risk behaviours are “actions that put individuals at increased risk for premature morbidity or mortality” (Pack, Wallander, & Browne, 1998, p. 409), including such things as substance use (e.g., tobacco and alcohol consumption, illicit drug use), violent behaviour (e.g., fighting or weapon carrying), suicidal behaviour, and dangerous use of a motor vehicle (e.g., driving under the influence of a substance, failure to wear a seatbelt, riding in a car driven by someone under the influence of drugs or alcohol). Examining high-risk behaviours in adolescent populations is key as these behaviours, particularly substance use and criminal activity, tend to begin in adolescence (Wong, Wiest, & Trembath, 1998).

Findings from both national (both U.S. and Canadian) and provincial (e.g., BC) youth risk surveys indicate increased engagement in high-risk behaviours such as alcohol and drug abuse, physical fighting, early sexual behaviour, weapon carrying, and gang membership among adolescents (Centres for Disease Control and Prevention, 2011,

Canadian Institute for Health Information, 2009; Smith et al., 2009). Results additionally show an increased association between engagement in such high-risk behaviours and experiences of physical and/or sexual abuse, severe emotional distress, serious consideration of and/or attempted suicide, running away from home, significantly lower feelings of connectedness to their families and schools, and significantly lower post-secondary educational goals when compared to youth who do not engage in such high-risk behaviours (Smith et al., 2009). However, as is the case with most large-scale survey administrations, students with disabilities were not included in these participation samples. Examining high-risk behaviours in school-based populations of adolescents with disabilities is potentially of even greater importance as research has shown, for example, that students with learning disabilities tend to experience more stress during adolescence due to an increased rate of academic failure, greater difficulties with social and emotional adjustment, lower ratings of self-esteem, and higher levels of depression (Wong et al. 1998).

A complete understanding of the social experiences of students with disabilities requires consideration not only of these students' vulnerability to peer victimization, but also their susceptibility to a wide range of high-risk behaviours including drug and alcohol abuse, adolescent pregnancy (Kleinfeld & Young, 1989), sexually transmitted disease (Lamorey & Leigh, 1996), depression (Leone, 1991; VandeKamp, 2001), suicide, juvenile delinquency, physical and sexual abuse (Benedict, White, Wulff, & Hall, 1990; Lamorey & Leigh, 1996; Sobsey & Mansell, 1997; West, Richardson, LeConte, Crimi, & Stuart, 1992), and school drop-out (Blackorby, Edgar, & Kortering, 1991; Wagner, 1991; Shapland, 1999). However, a review of the research indicates a dearth of studies examining high-risk behaviours in students with special needs. The ones that do exist have focused on the use of alcohol and drugs, as reviewed below.

The limited research that does exist has yielded mixed or contradictory findings, with some studies suggesting that students with disabilities are no more likely to use drugs or

alcohol than their peers without disabilities, and other studies suggesting that the characteristics of some adolescents with disabilities (e.g., school failure, low commitment or lack of connection to school) may place them at greater risk for use or abuse of these substances than their peers without disabilities (Leone, 1991). However, methodological limitations (e.g., mixed disability type groupings, etc.) have made it difficult to ascertain whether certain groups of students with disabilities (i.e., specific learning disabilities, mild intellectual disabilities) would exhibit a lower or higher prevalence of high-risk behaviours, relative to their peers without disabilities.

Two studies have been conducted examining the high risk behaviours of individuals with mild intellectual disabilities. One study examined substance disorder in adults with mild intellectual disabilities (Westermeyer, Kemp, & Nugent, 1996), and a second study examined substance use, violence (i.e., weapon carrying), suicide, and car safety in African American adolescents with mild intellectual disabilities (Pack et al., 1998). Each is considered in detail below.

In their study comparing the nature and severity of substance disorder in adult in-patients with and without mild intellectual disabilities, Westermeyer and colleagues (1996) found that in-patients with mild intellectual disabilities and substance disorder ($n=40$) began using at a later age, used fewer substances in their lifetime (especially illicit ones), used less frequently in the past year, had lower severity scores on measures of substance abuse severity, and demonstrated milder and briefer substance use histories than their peers without disabilities ($n=308$). Still, in-patients with mild intellectual disabilities had a lifetime use of legal substances (i.e., alcohol and tobacco) that was similar to their peers without disabilities. In contrast, in-patients with mild intellectual disabilities were more likely than their peers without disabilities to have a parent with substance disorder. Findings also suggested that less substance abuse was needed for in-patients with intellectual disabilities to trigger physical and psychological health problems associated with substance abuse than

their peers without disabilities. Moreover, despite the later onset and lower frequency of use, in-patients with intellectual disabilities experienced difficulties that led to their treatment in a shorter period than their peers without disabilities. The researchers hypothesized that these differences may be related to the lower doses associated with difficulties, pointing out that many of the in-patients with intellectual disabilities displayed a very low tolerance to substance use (i.e., experiencing blackouts or significant behavioural and/personality changes after only two or three drinks). A final observation that bears mentioning is that victimization accompanied substance abuse in the majority of cases for in-patients with intellectual disabilities (e.g., men were robbed and/or beaten, women were raped and/or beaten).

Given the clinical nature of the sample examined in the Westermeyer et al. (1996) study, results may be limited in their generalizability. As the researchers themselves note, the in-patients with intellectual disabilities that were included in this sample had fewer years of school and were less likely to be married than their peers without disabilities. Both of these demographic variables, along with other variables that were not explored, could have had a significant bearing on results. A matched sample would have eliminated questions surrounding the potential impact of these variables. Second, results from this adult sample may not extend down to adolescents. Third, this study examined substance disorder, not substance use per se. This is a subtle, but not insignificant difference. Finally, while the researchers observed a link between victimization and substance disorder, they did not explore this statistically. It is imperative that the association between high-risk behaviours and other psychosocial and environmental variables be explored in a standardized fashion in an effort to increase our understanding of how we can tailor school-based prevention and intervention programs for students with intellectual disabilities.

Pack et al. (1998) examined a wide range of high-risk behaviours (i.e., substance use, engagement in violence, suicide, and car safety) in a school-based adolescent sample

of African American students with mild intellectual disabilities enrolled in a special education class. In an effort to determine whether differences in measurement method influenced students' self-report ratings, one group of students was assessed using a confidential individual interview ($n=100$) and an age- and sex-matched group of students ($n=100$) was assessed using an anonymous group survey. Results of chi-square analyses indicated that the anonymous survey sample reported a higher prevalence of health-risk behaviours, on average, across items compared to the confidential interview sample, but only several behaviours were significantly different across groups. Specifically, prevalence rates of tobacco, alcohol, and illicit drug use were similar across groups. Results of this study were similar to those of national (U.S.) and Alabama prevalence rates for smoking (tobacco and marijuana), physical fighting, and suicide attempt, higher for binge drinking, and weapon carrying (especially guns), but lower for lifetime use of alcohol.

Due to its focus on a specific ethnic sample, it is difficult to determine whether results of the Pack et al. (1998) study are generalizable to a wider sample of students with mild intellectual disabilities. Furthermore, whereas the authors of this study did compare the observed prevalence rates to national and state prevalence rates, they did not include a direct, matched comparison sample of adolescents without intellectual disabilities. We do not know the age range of persons included in the national or state samples and whether these rates could be reliably compared to those found in the study. In addition, it is unclear as to how factors that were not controlled for (e.g., measurement method used to collect the national and state data) may have influenced the comparison of these samples.

Neither of the studies that examined high-risk behaviours in persons with mild intellectual disabilities included a matched sample. Furthermore, the comparison samples included in both studies were ill defined (e.g., age range, measurement method used). Moreover, neither study statistically examined the association between the high-risk behaviours of interest and other psychosocial and environmental variables. The present

study explores these relationships in a standardized fashion in an effort to increase our understanding of how we can tailor school-based prevention and intervention programs for students with mild intellectual disabilities.

In contrast to the paucity of studies examining high-risk behaviours in adolescents with intellectual disabilities, there are several studies that have examined drug and alcohol use/abuse among adolescents with specific learning disabilities. Unfortunately, findings from these studies have been mixed.

For example, Maag and colleagues compared reported prevalence rates for tobacco, alcohol, *and* marijuana use among two groups of middle-class young adolescents in Nebraska -- students with learning disabilities ($n=123$), and an unmatched sample of students without disabilities ($n=138$). Results indicated that use of tobacco and marijuana was significantly higher among students with learning disabilities, but use of alcohol was not. Neither teacher-rated behaviour nor self-rated self-esteem scores were found to be reliable predictors of substance use for either group (Maag, Irvin, Reid, & Vasa, 1994).

Elmquist, Morgan, and Bolds (1992) conducted a similar study and found that elementary and secondary school students with learning disabilities ($n=15$) reported similar levels of alcohol and drug use as compared with both students without disabilities ($n=68$) and students with behaviour disorders who were rated as "less aggressive" ($n=12$). In contrast, students with behaviour disorders enrolled in self-contained classes ($n=13$) reported significantly more alcohol and drug use than each of the other four groups of students. This latter group of students, who attended self-contained classes in a specialized school, also reported the lowest rates of self-esteem, and the highest rates of rebellious behaviour and susceptibility to peer influence.

The findings from this study suggest that alcohol and drug use may be a serious problem among students with varying disabilities. However, the generalizability of these results is questionable, given the small sample size, as well as the very limited information

provided regarding the assessment tool used to measure the variables of interest. The reader is simply told that the researchers used “Version B” of an evaluation tool designed for Utah’s K-12 prevention curriculum. Still, similar to the studies reviewed on victimization, results indicated a higher level of self-reported high-risk behaviours among students in segregated settings. Whether this difference is due to the students’ higher needs that cannot be accommodated in a regular classroom, missed opportunities that inclusive settings provide, and/or other factors, is uncertain.

Wong et al. (1998) compared the risk-taking behaviours of 251 junior and senior high school students: 104 general education students, 54 students with learning disabilities, and 93 alternate school students (i.e., students who transferred from their traditional high school due to lack of credits and/or rule violations). Given their feelings of isolation, as well as poor social and emotional functioning, students with learning disabilities were thought to be at increased risk for engagement in high-risk behaviours than their peers without disabilities. Analyses of ratings on self-report surveys tapping felony crimes, alcohol use, and drug use indicated that, although students with learning disabilities reported slightly higher levels of high-risk behaviours than their general education peers, the difference was not usually statistically significant. In contrast, alternate school students reported significantly more participation in criminal activity and use of alcohol and drugs than the other two groups.

The purpose of Wong et al.’s (1998) study was to examine the link between student status and involvement in high-risk behaviours. As such, it would have been helpful to provide the reader with greater detail regarding the descriptions of their participant samples. For example, how were the students with learning disabilities selected? How were they identified and/or how was a learning disability defined? Were there any exclusionary criteria? Additionally, did students attending the alternate education setting demonstrate any learning difficulties and/or were they identified with any learning

disabilities? The reader is uncertain, and as such, results of this study will be difficult to replicate and/or generalize to a wider population of students.

Similar to the findings reported by Wong et al. (1998), Katims, Zapata, and Yin (1996) found no significant differences in minor and major substance use among low SES elementary and middle students with learning disabilities ($n=150$) and an age- and sex-matched sample of students without learning disabilities ($n=150$). However, the risk factors for each group were seen to vary. Specifically, students with learning disabilities were influenced in their use of major substances by use of minor substances and stressful life events. In contrast, students without learning disabilities were influenced by close friends and peer pressure. Results of this study suggest that students with and without disabilities may vary in their pathways towards use of substances, and as such, further study into the relationships between high-risk behaviours and psycho-social and environmental factors is certainly warranted, especially in populations of at-risk but under-studied students (i.e., students with intellectual disabilities). It is difficult to compare these results to those of other studies, however. The age range of participants was lower than that of many of the other studies, and students with learning disabilities were recruited from both inclusive and self-contained classes, although no effort was made to determine whether high-risk behaviour varied as a function of classroom setting.

McNamara et al. (2008) compared the risk-taking behavior (i.e., substance use, engagement in minor and major delinquency, acts of aggression, sexual activity, and gambling activities) of three groups of Canadian adolescents (230 students with learning disabilities, 92 students with learning disabilities and AD/HD, and 322 age-, sex-, and parental education-matched students without learning disabilities or AD/HD). Results indicated that students with learning disabilities and comorbid AD/HD engaged more frequently in some risk-taking behaviours than the other two groups of students (i.e., smoking tobacco and marijuana, and engagement in minor acts of delinquency and direct

aggression). However, students with learning disabilities and students without disabilities demonstrated similar levels of risk-taking behaviour. Findings further revealed that psychosocial variables such as students' relationship with their mother, engagement in school and extra-curricular activities, as well as ratings of well-being and victimization partially mediated the link between risk-taking behaviour for students with learning disabilities and students with learning disabilities and comorbid AD/HD. One major methodological limitation to this study is the researchers' reliance on students' self-identification of "learning disability". It is entirely possible that a wide range of students with special needs, not just students with learning disabilities, self-identified as having a learning disability. Given that previous research investigating risk-taking behaviours among students with learning disabilities has focused primarily on substance use, the McNamara et al. study represents an important extension of the literature. The present study further extends the literature by examining a wide range of risk-taking behaviours in both students with specific learning disabilities and students with intellectual disabilities, and also explores the relationships between high-risk behaviours and psycho-social and environmental factors.

Research conducted with students in general education shows a positive association between engagement in high-risk behaviours and bullying behaviour (e.g., Flynt & Collins Morton, 2004). Specifically, with regard to hypothesized links between high risk behaviour and student reports of both victimization (through bullying, racial discrimination, gender harassment, and/or sexual imposition) and bullying perpetration, results of several studies conducted with students in general education indicate that previous exposure to victimization and violence is significantly associated with at least two types of high-risk behaviours -- carrying weapons and fighting (Brockenbrough, Cornell & Loper., 2002; DuRant, Getts, Cadenhead & Woods, 1995; DuRant, Pendergrast, & Cadenhead, 1994; Zins, Travis, Brown, & Knighton, 1994). There is also evidence that

adolescent victims who demonstrate aggressive attitudes report higher levels of involvement in most high-risk behaviours than do their non-victimized, aggressive peers (Brockenbrough et al., 2002). As such, adolescents' own social experiences, as a recipient or as a perpetrator of violence or aggression, may influence their involvement in high-risk behaviours. With the exception of the McNamara et al. research, these correlates have not been investigated extensively among students with disabilities. The present study aims to fill this gap by examining whether a significant relationship exists between victimizing others and high-risk behaviours in both students with and without disabilities.

A final study by Svetaz, Ireland, and Blum (2000) to be considered in this section is one that investigated the emotional well-being, and identified risk and protective factors associated with emotional distress, among adolescents with and without learning disabilities. Data for this study were obtained from the National Longitudinal Study of Adolescent Health (Add Health Study). Results of correlational and regression analyses of in-home interview data indicated that adolescents with learning disabilities ($n=1603$) had twice the risk of emotional distress as their peers without disabilities, and that females with disabilities in particular were at twice the risk of attempting suicide and for involvement in violence than females without disabilities. Similar to students in the general adolescent population (Resnick, Bearman, Blum et al., 1997), the strongest single associated risk factor for adolescents with learning disabilities was having been a victim or a witness to a violent act. Findings from the survey also revealed that, whereas educational achievement was below that of their peers, students with learning disabilities reported similar levels of school and family (parent) connectedness to their peers without disabilities. In fact, connectedness to parents and school were identified as the factors that most strongly correlated with diminished emotional distress, suicide attempts, and violence involvement among adolescents with learning disabilities.

Unfortunately, very few details were provided with respect to the participant sample and the survey measures used in the Svetaz et al. (2000) study. Moreover, inclusionary criteria for students with learning disabilities consisted of an affirmative response, by parents, to two questions: Does your adolescent have a LD, and has he or she ever been in special education classes? Unfortunately, parents are often confused about their children's special education status. As such, it is possible that students with intellectual disabilities were included as part of the learning disability sample. The authors themselves note that "the different types and severity of LDs could not be determined" (p. 347), and then proceed to indicate that an abridged version of the *Peabody Picture Vocabulary Test-Revised*, a measure of receptive vocabulary, served as the "only measure of IQ that was provided during the study." A further limitation of this study is a lack of a matched sample. The authors briefly discuss the use of a weighted sample to address the complex sampling design. Unfortunately, no further details of this procedure are provided. As such, it is difficult to determine whether these results can be generalized to a larger adolescent population.

To summarize, studies that have examined the prevalence of high-risk behaviours among persons with disabilities have yielded mixed results, although many of these studies have indicated that students with learning disabilities, in particular, are not at greater risk for engaging in at least some kinds of high-risk behaviours than their general education peers. The majority of these studies, however, suffer from methodological problems that limit the generalizability of findings, and include weak descriptions of students with disabilities (e.g., have combined students with varying disabilities into one group and/or have used various definitions of "learning disability"), inadequate comparison samples and/or matched groups, small sample sizes, insufficient information about assessment measures, and the almost exclusive focus on drug and alcohol use. The present study extends this research by exploring a range of high risk behaviours (i.e., alcohol and drug use, engagement in violent

behaviour) among both students who have been formally diagnosed as either having a specific learning disability or identified as having a mild intellectual disabilities, as compared with a matched sample of students without disabilities.

School Belonging

Carol Goodenow (1993) defines school belonging as the sense of “psychological membership in the school or classroom, that is, the extent to which students feel personally accepted, respected, included, and supported by others in the school environment” (p.80). While operational definitions and measurement tools may vary across studies, a growing body of research has consistently demonstrated that positive feelings of school belonging are associated with more positive academic, affective, and social outcomes, and serve as a buffer against negative behaviour (Blum, 2005). Positive academic outcomes include higher expectations for class success, intrinsic and mastery goal orientations, higher school-related motivation, higher levels of self-reported effort, higher perceptions of academic tasks as being interesting, important and useful, reduced absenteeism (L. Anderman, 2006), and in some studies, an association with higher levels of academic performance (Osterman, 2000). In addition to positive academic outcomes, feelings of school belonging have been shown to be associated with a range of affective and well-being outcomes, including lower levels of emotional distress, lower suicidal ideation, lower levels of involvement in violence, criminal activity, gang membership, school dropout, less frequent substance use (Catalano, Haggerty, Oesterle, Fleming & Hawkins, 2004; King, Vadourek, Davis & McLellan, 2002; McNeely, Nonnemaker, & Blum., 2002; Resnick et al., 1997), lower levels of depression, negative school-related affect, avoidance of behavioural problems at school, as well as higher levels of positive school-related affect, empathy, social competence, self-esteem, and general optimism (E. Anderman, 2002; L. Anderman, 1999; Battistich, Solomon, Kim, Watson, & Schaps, 1995).

A related body of work has shown a consistent and negative relationship between feelings of school belonging and victimization (Brockenbrough et al., 2002), with victims reporting lower feelings of school belonging than non-victims (e.g., Furlong et al., 1995). One recent study of survey data from eighth grade students in California, conducted by Baskin, Wampold, Quintana, and Enright (2010), found that belongingness was a significant moderator of the influence of peer acceptance on loneliness and of loneliness on depression. Specifically, students who reported high belongingness levels showed virtually no impact of peer acceptance levels on loneliness at school. It is interesting to note that, it was not feelings of *school* belongingness that buffered the negative effects of low peer acceptance, but students with high *nuclear family* belongingness that were protected from struggling with high levels of loneliness. Additionally, findings showed that high-belongingness students showed less vulnerability to depression in response to high levels of loneliness than did low-belongingness students. Specifically, at high levels of loneliness those who had high levels of broad belongingness (total belongingness, not specifically family or school belongingness) did not tend to have high levels of depression. Although the broad measure of belongingness utilized in this study varies from belongingness measures used in the remainder of the studies that will be reviewed in this section, the findings from this study highlight several points to consider. First, it helps us to consider how home and/or community factors may influence students' resiliency in the face of adversity at school. Second, it supports the value of considering belongingness as a potentially important buffer in the social lives of adolescents in preventing potential social and emotional maladjustment. Third, it strongly points to the need to investigate the association between belongingness, student and school variables in all students, including students with disabilities.

In their article entitled, *Research on School Bullying and Victimization: What Have We Learned and Where Do We Go from Here?*, Espelage and Swearer (2003) stress the

importance of asking [all] students whether they feel like they belong and are respected at school, how they view bullying, and how administration and staff model and promote respect for diversity. They argue that these factors play an instrumental role in how students treat each other. While the National Longitudinal Survey of Children and Youth (NLSCY) did not measure “school belonging” per se, findings from its 1998 report indicated that, whereas 17.5% of children without disabilities (ages 10 – 15) felt left out at school, a significantly higher percentage of students with special needs, 24.5%, felt left out (Canadian Council on Social Development, 2003). Additionally, fewer children with special needs reported that they received extra help from their teachers when they need it “most or all of the time” (80.1%) as compared with their peers without special needs (85.4%). Finally, 77% of students with special needs reported that their teachers treated them fairly “all or most of the time,” whereas 90% of their peers without special needs felt the same way (CCSD, 2003). Moreover, as some studies suggest that students with disabilities are over-represented as victims of school bullying (Knox & Conti-Ramsden, 2003; Marini et al., 2001; Morrison & Furlong, 1994, Sheard et al., 2001; Whitney et al., 1992; Thompson et al., 1994), it is essential to examine whether this higher rate could be associated with (or attributed to) lower feelings of school belongingness.

In a U.K. study conducted by Norwich and Kelly (2004), perceptions of “positive feelings” about school (i.e., current provision of and satisfaction with special education services, evaluation of classroom teacher, availability of help, involvement in decision-making, perspective on placement acceptability) were examined in a sample of middle school students (categorized as having “moderate learning difficulties”/“general learning difficulties”) enrolled in inclusive ($n=51$; 8 in designated resource rooms) and segregated ($n=50$) settings. Many of these students demonstrated additional areas of difficulty (e.g., 60% had language and communication issues). Findings from semi-structured interviews that were tailored in length and item content to individual students’ needs, revealed that a

majority of these students (65%) expressed mainly positive feelings for their current school (with boys reporting more positive feelings than girls), whereas only (4%) expressed mainly negative feelings. The majority of students (55%) also rated their current teachers positively; 54% felt they received enough help with their learning. Perspectives on whether they received enough help were consistent with feelings about whether they had to wait for help. Interestingly, 25% of students enrolled in inclusive settings reported receiving help from friends, whereas only 4% of students in specialized schools did so. An additional finding from this study was the high level of bullying reported by both students in inclusive and specialized schools (83% overall). Forty-nine percent of these students reported that their victimization was related to their learning difficulties. Students attending the specialized schools reported more bullying by students attending inclusive schools (30% vs. 12%), neighbours and outside peers (48% vs. 4%), than did students attending inclusive schools.

Although it is difficult to generalize from the findings of the Norwich and Kelly (2004) study, given their focus on “positive feelings” toward school, teachers, and availability of assistance rather than on school belonging per se, as well as their reliance on individually-tailored interview data, some general trends are evident. Specifically, findings indicated that the majority of students included in this study were satisfied with their present schools. At the same time, however, many of these students, especially those attending specialized schools, experienced a significant level of victimization, not only from students in their schools, but also from students attending other inclusive schools, neighbours, and peers. Unfortunately, no comparison sample of students without disabilities was included in this study, making conclusions about whether students with disabilities experience a higher level of victimization than their peers without disabilities difficult. Moreover, it is not clear whether and to what extent students with specific learning disabilities or mild intellectual disabilities were included in the sample and whether they were mixed in with students with other

learning difficulties (e.g., language and communication problems). It is noteworthy, nevertheless, that the nearly half of the students themselves voiced their learning challenges as the reason why they were recipients of bullying.

Hagborg's study (2003) of school belonging compared 52 students with learning disabilities with a sample of students without disabilities, matched in terms of grade, sex, and school. No other information regarding the sample was provided. Comparisons of ratings on three self-report questionnaires revealed that students without disabilities reported higher scholastic self-perceptions and lower feelings of school belonging than did students with learning disabilities. Interestingly, the two groups of students reported similar levels of social support from parents, teachers, classmates, and close friends. Results of subsequent correlational analyses suggested that school belonging for students with learning disabilities is more closely tied to parent and peer support, whereas teacher support was more related to school belonging for students without learning disabilities.

Students with learning disabilities, AD/HD, and dyslexia were investigated as part of a study evaluating school belonging and feelings about school in "chronically ill" Icelandic pre-adolescents (Svavarsdottir, 2008). Results from two self-report questionnaires indicated that students with "chronic psychological conditions or illnesses" reported significantly lower school connectedness and significantly less positive feelings about school than children without a chronic physical health condition or illness. Additionally, findings indicated that children who reported being victims of bullying at school felt significantly less connected to their school and provided significantly less positive feelings about school than children who did not report being victimized in school.

While these results certainly point to the need to make a targeted effort to both facilitate and encourage school connectedness and feelings of school belonging among children with special needs, they also make it difficult to determine just who these students are, and just how they should be targeted. Specifically, Svavarsdottir's sample of students

with “chronic psychological conditions or illnesses” included small samples of students with learning disabilities ($n=23$), AD/HD ($n=23$), and dyslexia ($n=6$), making generalization of results difficult. Moreover, it is unclear why students with dyslexia are not included in the category of “learning disability”. Finally, without a matched comparison sample of students *without* disabilities, one cannot determine whether these “chronically ill” students, as a group, report lower or higher levels of belonging and feelings about school than their peers without chronic health conditions.

In a US dissertation, Crouch (2010) examined obstacles to school inclusion in a Midwest sample of students with and without learning disabilities, as well as students with moderate (i.e., “disabilities which require significant physical assistance” – p. 54) and severe disabilities (i.e., “cognitive and physical disabilities which required a full time aide and substantial intervention” – p. 54) using both quantitative (i.e., school belonging and social interaction questionnaires) and qualitative data (i.e., teachers were asked about issues they faced during a district-wide process to increase inclusion). Results suggested that the obstacles faced in the transition to school inclusion (e.g., problems with teachers) had a negative impact on feelings of school belonging for students in grades 5 through 12. Conversely, an analysis of the qualitative data suggested that when students had positive experiences, especially with teachers and peers, they also experienced greater belonging. Furthermore, the experience of being bullied and having no or few friends was found to further marginalize students with disabilities in their new schools and maintain their status as “outsiders” (p. 142).

Using the same data set as Crouch (2010), McMahon, Parnes, Keys and Viola (2008) investigated school belonging among low-income urban youth (grades 5 through 9) with disabilities. The sample consisted of 31 students “without identified disabilities *or* with mild speech problems”, 26 students with “mild” disabilities (i.e., learning disabilities *or* emotional disability), 55 students with “moderate” disabilities (i.e., cerebral palsy, spina

bifida, muscular dystrophy, or traumatic brain injury), and 12 students with “severe” disabilities (i.e., severe or profound cognitive delay or severe physical disabilities). Using structural equation modelling, the authors of this study tested a model that examined the relationships among social stressors and resources, school belonging, academic outcomes (i.e., academic self-efficacy and school satisfaction), and psychological outcomes (i.e., anxiety and depression). Their model posited that school stressors (e.g., peer and staff influences) would predict lower levels of school belonging, whereas school-based social resources (e.g., teacher support and empathy) would predict greater belonging. Data supported the proposed model, and were consistent with the theory that students who perceived that they had greater access to more school-related social resources and who reported fewer school-related stressors experienced higher levels of school belonging, which in turn, predicted higher levels of academic self-efficacy and school satisfaction, and lower rates of depression. Anxiety was predicted by academic self-efficacy or school belonging.

Unfortunately, it is difficult to ascertain the degree to which findings from these studies are generalizable, given the small sample sizes considered and the various special needs groups distinguished, with students with learning disabilities mixed in the same group as students with other disabilities (e.g., “emotional disabilities”). Moreover, these studies did not include a true comparison sample of students without disabilities. Perhaps of greater concern with regard to issues of generalizability, however, is the fact that the students with disabilities that were included in these studies had all just transitioned from a specialized school for students with disabilities to inclusive middle and high schools. As such, we do not know if this particular sample of students would be representative of a typical sample of students with learning difficulties. Nevertheless, the results obtained are similar to those reported with students in the general population, namely, that feelings of school belonging are associated with positive academic and psychological outcomes (E.

Anderman, 2002; Goodenow, 1993), suggesting that perhaps the same processes operate across students with and without disabilities.

To summarize, studies that have examined feelings of school belonging in children and adolescents with disabilities are seemingly contradictory as to whether students with disabilities demonstrate levels of school belonging that are higher, lower, or similar to those reported by their peers without disabilities. Moreover, major methodological limitations limit the generalizability of the findings obtained. Furthermore, no studies could be found that have compared the feelings of school belonging for students with intellectual disabilities to those of students with other disabilities or students without disabilities. The present study addresses this gap in the research literature by examining feelings of school belonging in a formally diagnosed sample of students with specific learning disabilities and mild intellectual disabilities in comparison with a matched sample of students without disabilities.

CHAPTER 3 PROBLEM STATEMENT

A small but growing body of research has suggested that students with varying disabilities may be over-represented as victims and perpetrators of school violence (e.g., Kaukiainen et al., 2002; Marini et al., 2001; O'Moore & Hillery, 1989; Rose et al., 2009; Whitney et al., 1994) and may be more susceptible to the risks associated with a wide range of high-risk behaviours than their peers without disabilities (e.g., Elmquist et al., 1992; Lamorey & Leigh, 1996; Katims et al., 1996; Maag et al., 1994; McNamara et al., 2008; Pack et al., 1998; Westermeyer et al., 1996, Wong et al., 1998). However, a careful review of the studies on which these conclusions are based points to both methodological limitations and mixed findings that make conclusions difficult. Extending this literature, the present study investigates whether students enrolled in inclusive classrooms who have been formally identified/diagnosed with learning disabilities and/or mild intellectual disabilities are at greater risk for bullying/victimization, are more likely to engage in high-risk behaviour or report less school belonging and safety than do students without disabilities.

The present study also explores the relationships among social experience variables within each of the three subgroups, considering the relationships among self-reports of victimization and bullying, racial discrimination, sexual imposition and gender harassment, perceived safety and school belonging, and high-risk behaviours (alcohol/drug use and violent behaviour). The literature reviewed above also provides evidence that a number of social-environmental factors, including feelings of school belongingness, perceptions of school safety, and engagement in high-risk behaviours, are related to adolescent victimization (Baskin et al., 2010; Brockenbrough et al., 2002). Specifically, the present study compares three groups of students from the same school, grade and sex groups, who differed in terms of whether they were formally identified by the school district as having specific learning disabilities, mild intellectual disabilities, or were not identified as having a

disability. The research questions and hypotheses described below were developed to guide the analyses of the present study.

Victimization/Bullying and Peer Difficulties

Based on the review of literature above, it was expected that adolescents with disabilities (intellectual and learning disabilities) would report a higher level and frequency of peer difficulties than adolescents without disabilities, including greater victimization and bullying, racial discrimination, gender harassment, and sexual imposition. The present study also explored whether these social experiences varied as a function of the nature of the disability considered, comparing students with mild intellectual disabilities versus specific learning disabilities. Due to the paucity of research examining racial discrimination, gender harassment, and sexual imposition among students with disabilities, no predictions were made regarding which group would report a higher level and frequency of victimization or perpetration in these areas (i.e., racial discrimination, gender harassment, and/or sexual imposition).

Rationale. Regardless of methodology employed (i.e., peer nominations, student and/or teacher questionnaires, individual interviews, direct observations), a general conclusion derived from the extant literature is that students with disabilities (whether intellectual disabilities or learning disabilities) are over-represented as victims of bullying, and are bullied at a higher frequency than their peers without disabilities (Marini et al., 2001; Morrison & Furlong, 1994; Nabuzoka & Smith, 1993; O'Moore & Hillery, 1989; Rose et al., 2009; Whitney et al., 1994). A critical review of the evidence, however, casts some doubt as to the generality of this conclusion, especially when students with specific learning disabilities and/or mild intellectual disabilities are integrated within the school context rather than segregated in special programs or classrooms. Accordingly, the present study explores whether students with disabilities, both specific learning disabilities and mild intellectual disabilities, would report higher or similar levels of both bullying and victimization

than a matched sample of students without disabilities, or report similar levels of bullying and victimization than their peers without disabilities.

Of additional interest was whether students with disabilities would also report greater or similar levels of racial discrimination, gender harassment, and/or sexual imposition, indices that have not been explored in previous studies comparing students with and without special needs. While Sobsey and Mansell (1997) reported that children with disabilities were more likely than others to be victims of various forms of neglect, physical and sexual abuse in general, there is no available published research that examines racial discrimination, gender harassment, or sexual imposition in school-based populations of students with disabilities. Accordingly, for these three outcome variables, these analyses were considered exploratory, although it was considered most likely that students with disabilities would report higher levels of all forms of peer harassment, including victimization, racial discrimination and gender harassment, and sexual imposition. Given previous evidence that students with specific learning disabilities, who demonstrate difficulties with aggressive, impulsive, and hyperactive behaviour, bully others more than they are themselves bullied (Swanson & Malone, 1992; Kaukiainen et al., 2002; Whitney et al., 1994), it was also expected that students identified as having learning disabilities would report greater bullying than would students with mild intellectual disabilities, and students without disabilities.

Sex differences in bullying and victimization in the general population depend on the type of bullying considered and the type of measurement used (Archer, 2004; Currie et al., 2008; Delfabbro et al., 2006; Peterson & Ray, 2006; Underwood, 2003). Boys are generally found to report higher levels of bullying overall (e.g., O'Moore & Hillery, 1989; Olweus, 1993), although not all studies report such sex differences (e.g., Slee, 1994). Boys also report higher levels of physical or direct bullying (e.g., Olweus, 1978; Farrington, 1993). Studies are mixed as to whether sex differences exist for relational or indirect

bullying (e.g., Archer, 2004; Underwood, 2003). Do sex differences emerge for students with mild intellectual or learning disabilities? Given the sparse research conducted with students with disabilities, no predictions were made with respect to possible sex differences in bullying and victimization scores of students with mild intellectual disabilities and specific learning disabilities.

Finally, no predictions were made regarding variations as a function of sex, and/or type of disability (mild intellectual, specific learning disability, or no disability) in how students respond to peer harassment that they received (as a victim) or that they observed (as a witness). To date, only one, retrospective, qualitative study of adults with developmental disabilities has explored how persons with disabilities have responded to peer harassment, both as victims and witnesses (Marini et al., 2001). Clearly, there is a need to ask secondary students - with intellectual and learning disabilities – how they respond to peer harassment while they are still in the environment where harassment is taking place.

Perceptions of Safety

A second, exploratory focus of the present study was on whether student perceptions of school safety varied as a function of sex, whether or not the student has a disability, and/or the type of disability experienced. Specifically, the present study first examined variations in both perceived safety and reported violence as a function of disability group and sex, followed by an examination of the relationships between perceived safety and reported violence within each disability group. As the students with mild intellectual disabilities and specific learning disabilities were recruited from inclusive schools (as opposed to specialized schools), it might be expected that they would report lower levels of perceived safety and higher levels of violence than their peers without disabilities. However, due to a lack of research in this area (with the exception of the small *n* study conducted by Morrison et al., 1994- see below), no predictions were made. For this same

reason, no predictions were made regarding differences in perceived safety between students with specific learning disabilities and those with mild intellectual disabilities.

Rationale. In a U.S. study conducted by Morrison and colleagues (1994), no differences in perceptions of school safety were found among high school students with severe learning disabilities, students with behavioural and academic difficulties, and general education students. Although these groups of students experienced varying levels of personal violence and differed in their ratings of general school violence, their perceptions of personal safety did not differ. Morrison et al. also found that both general education students and students with learning disabilities who reported greater feelings of safety at school were those who reported experiencing less violence and who felt that they had access to social support (from adults for general education students and from peers for students with behavioural and academic difficulties). Interestingly, this relationship did not hold for students with severe learning disabilities. Instead, for this latter group, a high positive correlation was found between perceptions of school safety and reported violence; with students who reported a high level of violence also reporting greater perceptions of school safety. Although this relationship may initially seem paradoxical, the researchers suggest that it may be attributable to the fact that students with severe learning disabilities included in their sample were enrolled in rather safe, self-contained classrooms. Given the small sample size in this study ($n=19$), further investigation is warranted.

School Belonging

A growing body of research has demonstrated that positive feelings of school belonging are associated with more positive social and academic outcomes, including higher levels of academic performance (e.g., Osterman, 2000) and lower rates of victimization (e.g., Brockenbrough et al., 2002) in the general population. To date, research has not truly examined whether school belonging varies across students with and without disabilities generally, nor between students diagnosed with specific learning

disabilities versus mild intellectual disabilities, although research on “positive feelings” about school by Norwich and Kelly (2004) found no significant differences between students with “moderate learning difficulties” enrolled in inclusive vs. specialized schools. Although it is difficult to generalize from the findings of the Norwich and Kelly study, given their focus on “positive feelings” toward school rather than school belonging per se, and their reliance on interview data which varied somewhat across informants, further investigation of student perceptions of school belonging was undertaken in the present study. Studies that have examined variables similar to school belonging (e.g., “school connectedness” or “positive feelings” toward school) in children and adolescents with disabilities in general are seemingly contradictory as to whether they evidence levels of school belonging that are higher, lower, or similar to those reported by their peers without disabilities. Factors such as varying age samples, differences in operational definitions (e.g., school connectedness vs. school belonging) and assessment tools, as well as major methodological limitations, including small or “mixed” samples of students with disabilities may very well explain these differences in findings. Furthermore, no studies could be found that have compared the feelings of school belonging for students with intellectual disabilities to those of students with other disabilities or students without disabilities. Therefore, no specific predictions regarding variation as a function of disability status were posited.

High-Risk Behaviours

A major consideration in the present study was whether student reports of high-risk behaviours (alcohol/drug use, violent behaviour) varied as a function of sex or, more importantly, type of disability (mild intellectual disability, specific learning disability, no disability). Given the almost complete absence of research examining high-risk behaviours in persons with mild intellectual disabilities, as well as the wide-spread methodological limitations of studies examining high-risk behaviours in persons with specific learning

disabilities, it is difficult to make hypothesis regarding potential differences between disability groups and/or sex. Nevertheless, findings from several studies comparing students with specific learning disabilities with their peers without disabilities have found that these two groups of students are at similar risk for engaging in at least some kinds of high-risk behaviours. As such, it was expected that students with specific learning disabilities and mild intellectual disabilities would report similar levels of engagement in high-risk behaviours as their peers without disabilities. Due to a paucity of research, no predictions were made regarding differences in engagement in high-risk behaviours between students with specific learning disabilities and those with mild intellectual disabilities.

Rationale. As noted in the preceding review of literature, there is a dearth of research examining high-risk behaviours among persons with disabilities. Research conducted with students in general education shows a positive association between engagement in high-risk behaviours and bullying behaviour (e.g., Flynt & Collins Morton, 2004). Of interest in the present study was whether a relationship exists between high-risk behaviours and reported victimization and/or bullying, and whether this relationship varies as a function of sex or disability group.

Studies that have examined the prevalence of high-risk behaviours in persons with disabilities have yielded mixed findings as to whether students with disabilities are at higher risk for engaging in such behaviours as compared to their peers without disabilities. Many of these studies have indicated that students with learning disabilities, in particular, are not at greater risk for engaging in at least some kinds of high-risk behaviour than their peers without disabilities, but that the risks associated with such engagement may differ for these students (i.e., multiple pathways). The majority of these studies, however, suffer from methodological problems that limit the generalizability of findings, and include weak descriptions of students with disabilities (e.g., have lumped together students with varying

disabilities into one group and/or have used various definitions of “learning disability”), inadequate comparison samples and/or matched groups, small sample sizes, insufficient information about assessment measures, and the almost exclusive focus on drug and alcohol use. As such, it is difficult to compare study results and to determine whether group differences are a result of variables of interest or confounding variables. Finally, there is a dearth of research examining high-risk behaviours in persons with intellectual disabilities. Given these mixed findings, no specific hypotheses were considered a priori.

Interrelationships among Social Experience Variables

A final focus in the present study was an examination of whether the interrelationships among various social experiences differed for students identified as having mild intellectual disabilities, learning disabilities, or students without disabilities. Of particular interest are the relationships observed between (1) school belonging and victimization, (2) reported peer harassment (victimization, racial discrimination, gender harassment, and sexual imposition) and reported involvement in high-risk behaviours (e.g., alcohol/drug use and violent behaviour) and (3) reported bullying and involvement in high risk behaviours. Consistent with previous research on students in general education, it was expected that greater victimization would be associated with lower feelings of school belonging for students with mild intellectual disabilities, students with specific learning disabilities, and students without disabilities although these relations may be stronger for students with disabilities than for students without.

Rationale. As previously mentioned, research conducted with general education students has shown a consistent relationship between sense of school belongingness and victimization, with victims reporting lower feelings of school belongingness than non-victims (e.g., Furlong et al., 1995). If, as some suggest, students with disabilities are over-represented as victims of school bullying (Knox & Conti-Ramsden, 2003; Marini et al., 2001; Morrison & Furlong, 1994, Sheard et al., 2001; Whitney et al., 1992; Thompson et al.,

1994), it is essential to examine whether this higher rate could be associated with lower feelings of school belongingness than those reported by students without disabilities. This relationship was explored through correlational analyses conducted within each group of students (students with/without learning disabilities/mild intellectual deficits). With regard to hypothesized links between high-risk behaviour and student reports of both victimization (through bullying, racial discrimination, gender harassment, and/or sexual imposition), and bullying perpetration, results of several studies conducted with students in the general education population indicate that previous exposure to victimization and violence is significantly associated with at least two types of high-risk behaviours -- carrying weapons and fighting (Brockenbrough et al., 2002; DuRant et al., 1994, 1995; Zins et al., 1994a). There is also evidence that adolescent victims who demonstrate aggressive attitudes report higher levels of involvement in most high-risk behaviours than do their non-victimized, aggressive peers (Brockenbrough et al., 2002). Thus, one's own social experiences, as a recipient or as a perpetrator may influence adolescents' involvement in high-risk behaviours. It was expected that this pattern of relationships would hold true for students with specific learning disabilities and for students with mild intellectual disabilities, as well as for comparison students from the general education population, although the strength of these relations may be greater for students with disabilities than for those without disabilities.

CHAPTER 4 METHODOLOGY

Background

In 1989, British Columbia's Mandate for the School System specified human and social development as major goals in education, and in 2001, the Ministry of Education in British Columbia established *social responsibility* as one of four "foundational skills", as important as reading, writing and numeracy. In response to demands for school accountability, requiring BC schools to provide evidence of progress across these areas, one urban district initiated the development of an extensive survey of secondary youth in 2005 in order to evaluate student perceptions of the social climate of their school and their own social behaviour (e.g., bullying and victimization).

The resulting *Safe School & Social Responsibility Survey for Secondary Students* was developed as part of a collaborative school-university initiative by a committee of educators within a single school district (administrators, vice principals, teachers, counsellors, and the district's Social Responsibility Committee), in consultation with university researchers, Dr. Terry Waterhouse, University of the Fraser Valley and Dr. Shelley Hymel, University of British Columbia. Adopting a broad perspective on school safety, the survey asked about experiences with discrimination, gender harassment and bullying, student attitudes about harassment, student engagement in high-risk behaviours such as drug and alcohol use, sexual imposition, gender harassment and violent acts, as well as students' concept of self and feelings of belongingness in the school community and their perceptions of adult support, school climate and safety. Student responses to this survey provided the data evaluated in the present study, as described in greater detail below.

Participants

Participants included 151 high school students with special educational needs (83 males, 68 females, grades 8 – 12, 13 to 19 years), as well as a matched sample of 151 students without disabilities (general education students, 83 males, 68 females, grades 8-12) who reported the same sex, grade, school, and race/ethnicity¹ from 10 secondary schools in an urban school district in south-western British Columbia. Students with disabilities included those designated according to the British Columbia Ministry of Education's criteria as having mild intellectual disabilities ($N=94$, 50 males, 44 females) or specific learning disabilities ($N= 57$, 33 males, 24 females), with no comorbid identifications/diagnoses. Briefly, at the time of this study, a student with a *mild to moderate* intellectual disability was identified as one who has intellectual functioning that is two or more standard deviations below the mean on an individually administered test of intellectual functioning, and has limitations of similar degree in adaptive functioning in at least two skill areas appropriate for the student's age. A student with a diagnosis of a specific learning disability demonstrates at least average intellectual functioning on an individually administered test of intellectual functioning, but demonstrates significant processing difficulties that affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. As such, learning disabilities are distinct from global intellectual disabilities. A more detailed description of these Ministry of Education criteria is provided in Appendix A.

The matched sample of general education students were taken from a larger, district-wide sample including 9683 secondary students (grades 8-12; 4725 males [48.8%], 4758 females [49.1%]) from the same 10 schools, with an overall participation rate of about 80%.

¹ The matched sample of general education students were matched, in all possible cases, with students with mild intellectual and specific learning disabilities. In the 5 cases where race/ethnicity data was missing (4 for MID and 1 for SLD, respectively), students were matched with general education students whose race/ethnicity data was also missing.

For the purposes of the present study, permission to use a subsample of these data secondarily as a comparison sample was obtained from the school district, with the agreement that the anonymity of individual students, schools and district be preserved in any publication arising from these analyses (i.e., there was no identifying information that could jeopardize participant confidentiality).

The final matched sample included 151 students without disabilities (i.e., general education students), 94 students with mild intellectual disabilities (50 males, 44 females), and 57 students with specific learning disabilities (33 males, 24 females). A summary of demographic characteristics for the three groups (participants without disabilities, participants with mild intellectual disabilities, and participants with specific learning disabilities) is presented in Table 1.

Table 1

Participant Demographic Characteristics

	MID N = 94	LD N = 57	Matched Sample N = 151
Sex			
Male	50 (53%)	33 (58%)	83 (55%)
Female	44 (47%)	24 (42%)	68 (45%)
Grade			
8	19 (20%)	19 (33%)	38 (25%)
9	18 (19%)	14 (25%)	32 (21%)
10	22 (23%)	7 (12%)	29 (19%)
11	21 (22%)	14 (25%)	35 (23%)
12	14 (15%)	3 (5%)	17 (11%)
Race/ Ethnicity			
Mixed	11 (12%)	10 (18%)	25 (16%)
Aboriginal	3 (3%)	6 (10%)	3 (2%)
African/Caribbean	2 (2%)	0	2 (1%)
Asian	39 (41%)	18 (32%)	57 (38%)
South Asian	8 (9%)	5 (9%)	13 (9%)
Caucasian	19 (20%)	12 (21%)	31 (20%)
Latin American	8 (9%)	3 (5%)	10 (7%)
Middle Eastern	0	2 (3%)	1 (<1%)
Don't Know	4 (4%)	0	7 (5%)
Missing	0	1 (2%)	2 (1%)
Years in Canada			
Less than 2	2 (2%)	0 (0%)	9 (6%)
2 to 4	7 (7%)	1 (2%)	11 (7%)
More than 4	82 (87%)	56 (98%)	130 (86%)
Missing	3 (3%)	0 (0%)	1 (<1%)
Primary Language			
English	51 (54%)	36 (63%)	77 (51%)
Other	42 (45%)	21 (37%)	73 (49%)
Missing	1 (1%)	0 (0%)	1 (<1%)

Procedure

In January 2006, as part of a district-wide accountability initiative, all secondary general education students throughout the district that were present on the day of testing completed the *Safe School & Social Responsibility Survey for Secondary Students* in a single group-testing session conducted by their classroom teachers during regular school hours (approximately 80% participation rate). Given that the surveys were completed as part of a district-wide self-evaluation, active parental consent was not obtained, with individual schools acting as *in loco parentis* (i.e., passive consent procedures were employed). However, prior to its administration, parents were informed of the survey through Parent Advisory Council meetings, newsletters (translated into different languages), and computer announcements (see Appendix B). Parents could request that their child(ren) not participate, and students whose parents withdrew consent or who themselves declined to participate were excluded without penalty.

As established at the Parent Advisory Council meetings and on newsletters and computer announcements, the data were collected anonymously (i.e., students did not provide their names on the surveys), and students were assured of the confidentiality of their individual responses, with interest in group results only. To maintain confidentiality, completed surveys were scanned and numerical responses entered into computerized databases, with data entry overseen by one of the university researchers, Dr. Terry Waterhouse. Each participating school was provided with summaries of student responses across all students in their school, along with results of analyses examining age and sex differences in responses for the major composite indices considered in the survey.

Students with special needs. Although some students with special needs in several schools completed the survey during the one-day district-wide administration ($n = 120$; 92 students with mild intellectual disabilities and 28 students with specific learning disabilities; 83 males, 68 females), many were excluded. For the present research, additional students

with special educational needs were recruited during that same academic year from special education and resource classrooms in four of the secondary schools included in the original district-wide initiative, with the prior permission of the district's school board ($n = 31$; 2 students with mild intellectual disabilities and 29 students with specific learning disabilities). The researcher did not have access to students' confidential files. Instead, school personnel (e.g., resource room/special education teachers) identified individual students or classes of students whose disability status matched the study's inclusion criteria (as described above, also see Appendix C), and who did not meet criteria for any comorbid identifications/diagnoses. The researcher then spoke to students in these targeted classrooms to explain the purpose of the study and to distribute consent forms to students who expressed interest in participating in the study. The recruitment procedure required about 10 to 15 minutes for each class (see Appendix D).

Participation was voluntary. Parents or legal guardians received and were asked to sign letters of consent on behalf of themselves and their children (see Appendix E). Students were also asked to sign a letter of assent on the day of data collection (see Appendix G). Both parents and participants were assured that all information would be coded to ensure anonymity, and would be treated as confidential. In addition, participants were informed that they could withdraw from the study at any time without penalty. All students who returned a completed consent form to school (regardless of whether they choose to participate) were entered into a draw for one of four \$50.00 gift certificates to a local music store.

Given that the survey used in this study required basic English proficiency, classroom teachers were asked to identify any student that might be unable to understand spoken or written English so that they might be excluded from the study. None were excluded. Only students who did not receive written parental consent or who themselves declined participation were eliminated from participation in the study. Additionally, students

with mild intellectual disabilities or specific learning disabilities who met criteria for additional special education designations were excluded from this study. Participation rate for the students with special educational needs was approximately 53%.

Students with special needs completed the survey individually or in small group sessions (with ample space between desks to ensure confidentiality of students' responses) during regular school hours in a quiet room in their schools (e.g., resource room, classroom, and cafeteria), at a time identified by their teacher. The researcher or research assistant read survey instructions, items, and response alternatives aloud to control for reading difficulties. They remained present in the room while students completed the survey and were available to answer any clarifying questions. Students completed the survey within 90 to 120 minutes, taking short breaks when needed. Non-participating students completed classroom work in another room during the administration of the surveys (see Appendix F).

Students were thanked for their participation in the study. Opportunity was provided to ask questions, and students were reminded that, if requested on the consent form, a summary of research findings (at the group, not individual level) would be mailed to their homes upon completion of the study. Although there were no known risks involved in participating in this study, the researcher worked in consultation with participating administrators and schools to be available for student support if required. The researcher contacted school counsellors and administrators prior to the administration of the surveys to be prepared to provide counselling in the event that answering the questions might distress any student. In addition, a student debriefing sheet was included in each survey packet (see Appendix H), indicating where participants might go for help and providing an opportunity for them to ask directly for help from school staff. In collaboration with school administrators, these sheets were adapted to the practices of the school (e.g., who the

school wanted to list as a resource). All debriefing sheets contained information about support services available in the school, as well as in the community (e.g., crisis hotlines).

Creation of matched samples. For comparison purposes, general education students who had completed the district-wide survey were identified for each student with special needs included in the present sample, both students with mild intellectual disabilities and students with specific learning disabilities. Several constraints were imposed on the selection of the 151 matches from the total sample of 9683 students without disabilities to ensure appropriate comparability. First, at the outset, students with missing grade ($n = 175$) or sex ($n = 200$) data were excluded. Additionally, students whose surveys contained 20% or more missing data were also excluded. Of the remaining general education students, all potential matches for each participant (i.e., students who were the same sex, race/ethnicity, and in the same grade and school) were identified, and one match was randomly drawn for inclusion in the matched sample.²

As indicated in the preface, the research methods and measures received approval from the UBC Behavioural Research Ethics Board (see certificate number in Preface).

Measures

The 2006 *Safe School & Social Responsibility Survey for Secondary Students* is a 71-item self-report survey that assesses (1) students' experiences with discrimination, gender harassment and bullying, (2) attitudes about harassment, (3) engagement in high-risk behaviours such as drug and alcohol use, as well as violent behaviour, (4) self-concept (5) feelings of belongingness in the school community, and (6) perceptions of adult support, school climate and safety. The survey utilized a variety of response formats including (a) 5-point Likert scales (e.g., 1 = *Not at all this year*, 2 = *Once or a few times*, 3 = *Every month*, 4

² Ideally, matching students across the three groups would have been the most powerful design, but matching across sex, grade, race/ethnicity, and school would have resulted in a much smaller sample size. As such, it was decided to include a matched group for each of the disability groups (i.e., one matched sample for students with mild intellectual disabilities ($n = 94$), and one matched sample for students with specific learning disabilities ($n = 57$)).

= *Every week*, 5 = *Several times a week*) and (b) a series of statements that students check either (i) all those that apply or (ii) one statement that applies the most (For a full copy of the survey, see Appendix H). A description of items and measures from the *Safe School Survey* that were considered in the present study follows.

Demographic characteristics. Demographic information was collected from each participant, including grade, sex, racial/ethnic group, length of residence in Canada, and primary language spoken in the home (see Table 1).

Student outcome variables. Although the *Safe Schools and Social Responsibility* survey tapped a broad range of issues and challenges facing secondary youth, only 19 of their measures were evaluated in the present study of students with mild intellectual and specific learning disabilities. Based on results of factor analyses conducted with the larger sample and/or conceptual groupings of similar items, 19 indices were derived from student responses to individual survey items. For the present study, student responses were averaged to compute composite indices of school climate and student outcome variables (negative/risk behaviours), each demonstrating good internal consistency (see Table 2).

Table 2

Student Outcome Variables, Internal Consistency Reliabilities, and Sample Items

Variable	α	Sample Items
Victimization (4 items)	.83	<i>How often have you experienced bullying and harassment at school? How often have you experienced physical/verbal/social bullying at school?</i>
Physical Bullying Victimization (single item)		<i>How often have you had experience with physical bullying (hitting, shoving, kicking)?</i>
Verbal Bullying Victimization (single item)		<i>How often have you had experience with verbal bullying (name calling, teasing, threats, putdowns)?</i>
Social Bullying Victimization (single item)		<i>How often have you had experience with social bullying (exclusion, rumours, gossip, humiliation)?</i>
Racial Discrimination Victimization (8 items)	.91	<i>How often have you had experience with hearing jokes about your race or culture? How often have you had experience with being excluded because of your race or culture?</i>
Gender Harassment Victimization (5 items)	.81	<i>How often have you had experience with someone calling you gay, fag, lesbian, or something similar? How often have you had experience with someone making crude or unwelcome comments about your body or your sexual behaviour?</i>
Sexual Imposition Victimization (6 items)	.87	<i>How often have you had experience with unwanted touching, kissing, grabbing, or pinching? How often have you had experience with forcing or threatening me to do something sexual when unwanted?</i>

Table continues

Variable	α	Sample Items
Bullying Behaviour (4 items)	.83	<i>How often have you taken part in bullying and harassment at school? How often have you taken part in physical/verbal/social bullying and harassment at school?</i>
Physical Bullying Perpetration (single item)		<i>How often have you had experience with physical bullying (hitting, shoving, kicking)?</i>
Verbal Bullying Perpetration (single item)		<i>How often have you had experience with verbal bullying (name calling, teasing, threats, putdowns)?</i>
Social Bullying Perpetration (single item)		<i>How often have you had experience with social bullying (exclusion, rumours, gossip, humiliation)?</i>
Racial Discrimination Perpetration (8 items)	.91	<i>How often have you had experience with telling jokes about someone's race or culture? How often have you had experience with excluding someone because of race or culture?</i>
Gender Harassment Perpetration (5 items)	.81	<i>How often have you had experience with calling others gay, fag, lesbian, or something similar? How often have you had experience with making crude or unwelcome comments about someone's body or sexual behaviour?)</i>
Sexual Imposition Perpetration (6 items)	.88	<i>How often have you had experience with unwanted touching, kissing, grabbing, or pinching? How often have you had experience with forcing or threatening someone to do something sexual when unwanted?</i>
Alcohol Consumption (3 items)	.86	<i>How often have you consumed alcohol at school? How often have you consumed more than 5 alcoholic beverages at one time? How often have you been under the influence of alcohol at school?</i>

Table continues

Variable	α	Sample Items
Drug Use (9 items)	.93	<i>How often have you used marijuana/ecstasy/cocaine (etc.) at school? How often have you been "high" at school because you used any of the drugs listed above?</i>
Violent Behaviour (6 items)	.82	<i>How often have you engaged in physical violence by pushing, slapping or hitting at school? How often have you carried a weapon at school? How often have you stolen something or purposefully damaged property (including graffiti) at school?</i>
School Safety (single item)		<i>I feel safe at school.</i>
School Belonging (6 items)	.76	<i>Other students at my school accept me as I am. I feel I belong at my school. I feel awkward and out of place at my school.</i>
Response to Personal Experience of Bullying (15 single items)		<i>When you have been picked on, discriminated against, bullied, harassed, or attacked...How often have you told the person(s) to stop? How often have you fought back physically?/How often have you done nothing?</i>
Response to Witnessing Bullying (16 single items)		<i>When you have seen others being picked on, discriminated against, bullied, harassed, or attacked...How often have you walked away? How often have you helped the person being hurt to get away? How often have you reported it to an adult at school?</i>

For each of the composite measures above, internal reliability estimates were computed for each of the four subgroups considered in the present study (participants without intellectual disabilities, participants with mild intellectual disabilities, and the two matched samples) using Cronbach's (1951) coefficient alpha. Because the student survey had not previously been used with students with disabilities, it was considered important to verify the reliability of this survey (and its various components) for both students with mild intellectual disabilities and specific learning disabilities. As can be seen in Table 3, values for coefficient alpha were consistently high and comparable across the two subgroups of students with special needs, and comparable to the estimates obtained for the two matched samples of general education students. Even in cases where reliability estimates appear to be somewhat lower for students with special needs (e.g., drug use composite), the internal consistency observed was considered adequate for research purposes. Thus, the internal consistency of all of the composite measures used in the present study³ was satisfactory for all four groups.

Adapted Safe School & Social Responsibility Survey for Secondary Students. In consultation with special education/resource teachers at several of the participating secondary schools, the *Safe School & Social Responsibility Survey for Secondary Students* was adapted for students with special educational needs. Specifically, some survey instructions, items, and response alternatives were re-worded to ensure the appropriate level of reading and comprehension necessary for students to complete the survey. Additionally, some sections of the survey were re-ordered and/or omitted to ensure that (a) students had an adequate amount of time to complete the survey and (b) that they did not become overwhelmed with survey content. To decrease the likelihood of skipped responses, formatting was also altered to include shading of alternate survey items. Finally, the stand-alone "Student Debriefing Sheet" from the original survey was

³ Seven single-item measures were also considered.

incorporated into the adapted survey (final page of the survey). The *content* of survey instructions, items, or response alternative were not altered, added to, or deleted in any other way. A copy of the adapted survey is provided in Appendix H.

Table 3

Reliability of Measures Across Groups

Measures	Participants with Mild Intellectual Disabilities (n = 94)	Participants with Specific Learning Disabilities (n = 57)	Matched General Education Students (n = 151)	All General Education Students (n = 9409)
	α	α	α	α
Victimization				
Bullying Victimization	.83	.70	.83	.83
Racial Discrimination	.89	.86	.93	.91
Gender Harassment	.74	.67	.85	.81
Sexual Imposition	.85	.81	.86	.87
Perpetration				
Bullying	.84	.88	.86	.83
Racial Discrimination	.91	.91	.91	.91
Gender Harassment	.72	.82	.87	.81
Sexual Imposition	.88	.68	.93	.88
Alcohol Use	.82	.86	.92	.86
Drug Use	.73	.71	.95	.93
Violence	.82	.82	.87	.82
Belonging	.68	.77	.82	.76

CHAPTER 5 RESULTS

Preliminary Analyses

Evaluation of matched samples used for comparisons. Participants without intellectual disabilities were randomly selected from a larger sample of general education students to match participants with mild intellectual disabilities and participants with specific learning disabilities on the basis of grade, sex, race/ethnicity, and school. In order to evaluate the representativeness of these matched comparison groups, three sets of analyses were conducted. A minimum alpha value of .01 was set for determining statistical significance.

First, a series of independent *t*-tests were conducted to determine whether there were any significant differences between the randomly selected matches ($n = 151$) and the larger sample of students without intellectual disabilities ($n = 9,409$). Results of 19 independent *t*-tests indicated no significant differences between participants randomly selected for inclusion in the study and the larger sample from which they were drawn (i.e., all *t*-values were statistically non-significant, $ps > .01$). Thus, matched students from the general population were considered representative of the larger student population who completed the survey. Please see Table 4 for a summary of the *t*-test analyses.

A second series of independent samples *t*-tests were conducted to compare students from the general population (i.e., students without disabilities) who were selected as matches for students with mild intellectual disabilities and those selected as matches for students with specific learning disabilities. Results of 19 independent samples *t*-tests indicated that there were no significant differences between these groups on either demographic variables (i.e., grade, sex, race/ethnicity) or any of the student outcome variables (see Table 4). All *t*-values were statistically non-significant ($ps > .01$).

Table 4

Summary of Preliminary T-Test Analyses Evaluating Comparability of Samples

Variable	<i>t</i>	<i>df</i>
Matched Sample (<i>n</i> =151) vs. Complete Sample (<i>n</i> =9,409)		
General Victimization	2.43	153.52
Physical Victimization	1.72	153.72
Verbal Victimization	1.98	9097
Social Victimization	0.70	9082
Racial Discrimination Victimization	2.01	153.11
Gender Harassment Victimization	2.15	153.47
Sexual Imposition Victimization	1.92	153.66
General Bullying	1.66	153.81
Physical Bullying	2.51	153.29
Verbal Bullying	1.49	8871
Social Bullying	-0.43	8858
Racial Discrimination Perpetration	1.53	9051
Gender Harassment Perpetration	2.12	153.27
Sexual imposition Victimization	2.11	152.64
School Safety	-1.56	9361
School Belonging	-1.27	153.46
Alcohol Use	2.22	152.36
Drug Use	1.52	152.52
Violent Behaviour	2.00	153.13

Table continues

Variable	<i>t</i>	<i>df</i>
MID Matches (<i>n</i> =94) vs. SLD Matches (<i>n</i> =57)		
General Victimization	-2.37	88.20
Physical Victimization	-1.70	81.53
Verbal Victimization	-1.76	149
Social Victimization	-0.30	149
Racial Discrimination Victimization	-1.37	149
Gender Harassment Victimization	-1.97	77.29
Sexual Imposition Victimization	-1.77	85.96
General Bullying	-1.26	93.11
Physical Bullying	-1.36	93.96
Verbal Bullying	-1.42	149
Social Bullying	-0.94	88.43
Racial Discrimination Perpetration	-1.37	89.33
Gender Harassment Perpetration	-1.77	82.08
Sexual Imposition Perpetration	-1.59	78.15
School Safety	-1.05	149
School Belonging	-0.37	149
Alcohol Use	-1.25	89.20
Drug Use	-1.14	88.36
Violent Behaviour	-1.40	82.39

Table continues

Variable	<i>t</i>	<i>df</i>
SLDs from District-Wide Administration (<i>n</i> =28) vs. SLDs Recruited Later (<i>n</i> =29)		
General Victimization	0.10	55
Physical Victimization	-1.07	55
Verbal Victimization	-0.17	55
Social Victimization	-0.10	55
Racial Discrimination Victimization	-0.17	55
Gender Harassment Victimization	-1.49	55
Sexual Imposition Victimization	0.99	41.50
General Bullying	0.84	55
Physical Bullying	1.25	47.51
Verbal Bullying	0.41	55
Social Bullying	1.66	55
Racial Discrimination Perpetration	0.65	55
Gender Harassment Perpetration	0.33	55
Sexual Imposition Perpetration	0.07	55
School Safety	-1.26	55
School Belonging	-0.66	55
Alcohol Use	-1.30	54
Drug Use	-2.75	9.93
Violent Behaviour	-0.60	55

* All *p* values > .01(i.e., non-significant).

A final series of independent *t*-tests were conducted to evaluate the comparability of two subgroups of students with specific learning disabilities – those who completed the survey as part of the district-wide initiative and additional students who were recruited later (see Procedures section). Specifically, a series of independent samples *t*-tests were conducted to determine whether there were any significant differences between the students with specific learning disabilities who completed the original survey as part of the district-wide initiative ($n = 28$) and participants with specific learning disabilities who were later recruited and completed the adapted survey ($n = 29$). Results indicated that there were no significant differences between students with specific learning disabilities who completed the original survey as part of the district-wide initiative and those who were recruited to complete the adapted survey (i.e., all $ps > .01$). Please see Table 4 for a summary of the *t*-test analyses. Due to insufficient sample size, no comparisons were made between students with mild intellectual disabilities who completed the original survey as part of the district-wide initiative ($n = 92$) and participants with mild intellectual disabilities who were recruited to complete the adapted survey ($n = 2$).

Primary Analyses

For the primary analyses conducted in the present study, a minimum alpha value of .01 was set for determining statistical significance. Effect sizes for the contrasts were examined using *r* values and effect sizes for the correlations were examined using r^2 values to determine what proportion of the overall variability in participants' scores in each of the four groups was attributable to variability in the student outcome or school climate indices (Field, 2009). Means and standard deviations for each group on each of the indices may be found in Table 6.

The primary focus of the present study was an examination of differences between participants with mild intellectual disabilities, students with specific learning disabilities, and student without disabilities (i.e., matches) in terms of their social experiences at school.

Although existent research suggests that students with disabilities may be at higher risk for negative social experiences than their peers without disabilities, the preceding critical review of this research leaves questions regarding the validity of this conclusion, particularly for students with high-incidence disabilities who are integrated within regular school settings. Nevertheless, consistent with previous research and speculation (as reviewed above), it was expected that student with mild intellectual disabilities and specific learning disabilities would report a higher level of peer difficulties than adolescents without disabilities, including greater victimization, bullying, racial discrimination, gender harassment, and sexual imposition than their peers without disabilities. Following Rosenthal (1992), who argued against using an overall or omnibus F test when testing specific predictions about group differences, planned or a priori t -tests were used to compare group means, in an effort to conserve power, given the relatively small sample sizes. Specifically, a series of a priori or planned contrasts were conducted to determine whether (1) students with mild intellectual disabilities significantly differed from a matched sample of students from the general population without disabilities, and whether (2) students with specific learning disabilities differed from a matched sample of students from the general population without disabilities. Although the two groups of students with disabilities were not matched directly, a third planned contrast was conducted to determine whether (3) students with mild intellectual disabilities differed significantly from students with specific learning disabilities on the dependent variable of interest. Subsequently, in order to evaluate sex differences, these same analyses were conducted for male and female students separately.

Victimization. It was expected that adolescents with disabilities (intellectual and learning disabilities) would report more peer victimization than adolescents without disabilities. To address this hypothesis, a series of three a priori, planned contrasts were

conducted across self-report indices of victimization, including peer victimization through bullying, racial discrimination, gender harassment and sexual imposition.

For the overall victimization composite, results indicated no significant differences between students with mild intellectual disabilities and their matched controls or between students with specific learning disabilities and their matched controls. Furthermore, no significant differences were found between students in the two disability groups. Thus, students with learning disabilities, students with mild intellectual disabilities and students without disabilities reported similar levels of peer victimization overall. The same pattern of non-significant differences across groups was observed when a series of a priori contrasts were conducted to evaluate differences across specific types of victimization, using single-item measures of (1) physical victimization, (2) verbal victimization and (3) social victimization. As well, subsequent planned comparisons, conducted to evaluate differences in reported victimization through racial discrimination, gender harassment and sexual imposition also yielded non-significant results. Table 5 provides a summary of the t values obtained for these analyses of reported victimization; all were non-significant. Running the analyses within each sex also revealed non-significant results across group means for all indices of peer victimization.

Thus, high school students with specific learning disabilities and those with mild intellectual disabilities did not report greater victimization by peers than did high school students without disabilities. This was true for both boys and girls and was true for overall victimization and for specific types of victimization (physical, verbal, social, racial discrimination, gender harassment, sexual imposition). Moving from victimization to perpetration, the next series of three a priori planned contrasts addressed variations across student groups in self-reports of bullying, racial discrimination, gender harassment and sexual imposition.

Bullying. It was expected that students identified as having learning disabilities would report greater bullying than would students with mild intellectual disabilities and students without disabilities. To address this hypothesis, a series of planned contrasts were conducted similar to those described above for victimization, with reports of bullying and perpetration serving as the dependent variables. Specifically, planned contrasts were conducted for overall reported bullying (based on a composite index of bullying) as well as three single-item measures of different forms of bullying (physical, verbal, social), and reported perpetration of racial discrimination, gender harassment and sexual imposition. Results indicated no significant differences between students with mild intellectual disabilities and their matched controls, or between students with specific learning disabilities and their matched controls for any of the measures of bullying or perpetration. Furthermore, no significant differences were found between students in the two disability groups. A summary of the *t*-test results for these contrasts is presented in Table 5. When similar contrasts were conducted within each sex, results were also non-significant for all indices of bullying or perpetration.

School safety, belonging and risk behaviours. A final series of three a priori planned contrasts were conducted to address variations across student groups in self-perceptions of school safety and school belonging, as well as self-reported engagement in high-risk behaviours (based on composite indices), respectively. Due to a paucity of research examining school safety and school belonging for students with special needs, no predictions regarding variation as a function of disability group were posited. However, findings from several studies comparing the high-risk behaviors of students with specific learning disabilities and students without disabilities have generally indicated that these two groups evidence a similar risk for engaging in at least some kinds of high-risk behaviours. As such, it was expected that students with specific learning disabilities and mild intellectual disabilities would report similar levels of engagement in high-risk behaviours as

their peers without disabilities. Results of the contrast analyses indicated no significant differences between students with mild intellectual disabilities and their matched controls, or between students with specific learning disabilities and their matched controls neither in terms of perceptions of school safety, school belonging, nor in terms of reported engagement in high-risk behaviours (drug use, alcohol use, violent behavior).

Furthermore, no significant differences were found between students in the two disability groups. Table 5 provides a summary of the *t* values obtained for these analyses of perceptions of school safety and school belonging, as well as self-reported engagement in high-risk behaviours; all were non-significant. Running the analyses within each sex also revealed non-significant results across group means for all three indices.

To summarize, results of a series of planned contrasts demonstrated consistently, across a range of dependent variables, that students with mild intellectual disabilities and students with specific learning disabilities did not differ significantly from matched comparison students without disabilities in their reports of victimization through bullying, racial discrimination, gender harassment, or sexual imposition, nor in their reports of perpetrating bullying, racial discrimination, gender harassment, or sexual imposition. Moreover, students with learning disabilities and students with mild intellectual disabilities did not differ significantly from matched controls in terms of perceptions of school safety or school belonging, nor in terms of reported high-risk behaviour (drug use, alcohol use, violent behaviour). These results were consistent across both boys and girls. Means and standard deviations for all variables across the groups are presented in Table 6 below.

Table 5

Summary of Planned Contrasts Comparing Students with Mild Intellectual Disabilities (MID), Specific Learning Disabilities (SLD) and Matched Comparisons on Indices of Victimization, Bullying, Perpetration, School Safety, Belonging and Risk Behaviour

	MID vs. MID Matches	SLD vs. SLD Matches	MID vs. SLD
Victimization Composite	$t(298) = 0.72$	$t(298) = -1.67$	$t(298) = -0.43$
Physical Victimization	$t(298) = 1.57$	$t(298) = -1.34$	$t(298) = -0.97$
Verbal Victimization	$t(298) = 0.87$	$t(298) = -0.71$	$t(298) = 0.24$
Social Victimization	$t(298) = 0.26$	$t(298) = -0.88$	$t(298) = -0.91$
Racial Discrimination	$t(298) = -0.93$	$t(298) = -0.82$	$t(298) = 1.40$
Gender Harassment	$t(298) = 0.12$	$t(298) = -1.05$	$t(298) = 1.23$
Sexual Imposition	$t(298) = 0.93$	$t(298) = -0.71$	$t(298) = 0.38$
Bullying Composite	$t(298) = -0.31$	$t(298) = -0.07$	$t(298) = 1.24$
Physical Bullying	$t(298) = 0.31$	$t(298) = -0.79$	$t(298) = 0.94$
Verbal Bullying	$t(298) = -0.35$	$t(298) = -0.11$	$t(298) = 0.98$
Social Bullying	$t(298) = -0.93$	$t(298) = 0.12$	$t(298) = 0.36$
Racial Discrimination	$t(298) = -0.45$	$t(298) = -1.14$	$t(298) = 0.66$
Gender Harassment	$t(298) = 1.27$	$t(298) = 2.56$	$t(298) = 0.52$
Sexual Imposition	$t(298) = 0.13$	$t(298) = 1.53$	$t(298) = 0.48$
School Safety	$t(298) = 0.96$	$t(298) = 0.94$	$t(298) = 0.34$
School Belonging	$t(298) = -0.13$	$t(298) = -1.00$	$t(298) = 1.39$
Alcohol Use	$t(296) = 0.04$	$t(296) = -1.29$	$t(296) = 0.11$
Drug Use	$t(275) = -0.29$	$t(275) = -0.04$	$t(275) = 1.01$
Violence	$t(298) = -0.39$	$t(298) = 1.17$	$t(298) = 0.05$

* All p values $> .01$ (i.e., non-significant).

Table 6

Means (M) and Standard Deviations (in parentheses) for Students with Mild Intellectual Disabilities (MID), Specific Learning Disabilities (LD), and Matched Samples on Student Outcome Variables

Variable	MID (n=94) M (SD)	MID Matches M (SD)	SLD (n=57) M (SD)	SLD Matches M (SD)
Victimization (Composite)	1.61 (0.68)	1.54 (0.58)	1.56 (0.56)	1.77 (0.81)
Physical Bullying	1.45 (0.78)	1.29 (0.54)	1.33 (0.58)	1.51 (0.89)
Verbal Bullying	1.84 (0.93)	1.72 (0.87)	1.88 (0.89)	2.00 (1.04)
Social Bullying	1.64 (0.94)	1.61 (0.81)	1.51 (0.63)	1.65 (0.94)
Gender Harassment	1.29 (0.44)	1.28 (0.41)	1.39 (0.43)	1.49 (0.74)
Sexual Imposition	1.29 (0.51)	1.22 (0.42)	1.32 (0.48)	1.39 (0.64)
Racial Discrimination	1.21 (0.45)	1.28 (0.47)	1.33 (0.50)	1.41 (0.73)
Bullying (Composite)	1.49 (0.60)	1.46 (0.54)	1.62 (0.70)	1.63 (0.82)
Physical Bullying	1.31 (0.66)	1.34 (0.67)	1.42 (0.68)	1.53 (0.89)
Verbal Bullying	1.67 (0.81)	1.63 (0.76)	1.81 (0.90)	1.82 (0.93)
Social Bullying	1.53 (0.77)	1.43 (0.66)	1.58 (0.78)	1.56 (0.96)
Gender Harassment	1.30 (0.44)	1.40 (0.51)	1.35 (0.53)	1.62 (0.83)
Sexual Imposition	1.15 (0.42)	1.16 (0.41)	1.19 (0.35)	1.33 (0.73)
Racial Discrimination	1.27 (0.53)	1.30 (0.50)	1.33 (0.57)	1.45 (0.71)
School Safety ^a	4.03 (0.90)	3.89 (0.99)	4.09 (0.95)	3.91 (1.17)
Belonging ^b	3.47 (0.70)	3.45 (0.75)	3.64 (0.74)	3.50 (0.85)
Alcohol Use ^c	1.12 (0.31)	1.12 (0.36)	1.12 (0.34)	1.22 (0.51)
Drug Use ^c	1.08 (0.19)	1.07 (0.28)	1.09 (0.19)	1.14 (0.40)
Violent Behaviour ^c	1.19 (0.31)	1.17 (0.30)	1.19 (0.31)	1.27 (0.48)

Note. Likert scale response formats, with the exception of School Safety, Belonging, Alcohol/Drug Use, and Violent Behaviour: 1 = Never, 2 = Once or a few times, 3 = About once a month, 4 = Every week, 5 = Every week or more

^a 1 = Never, 2 = Hardly ever, 3 = Some of the time, 4 = Most of the time, 5 = Always

^b 1 = NO, 2 = no, 3 = sometimes, 4 = yes, 5 = YES

^c 1 = Never, 2 = Once or a few times, 3 = Every week or more

Response to victimization. A final set of analyses examined whether student reports of their responses to victimization, either victimization experienced themselves or that they witnessed being perpetrated on others (i.e., responses they would use when they or someone they knew if faced with bullying) varied across student with specific learning disabilities, students with mild intellectual disabilities, and students without disabilities. Given the reported exploratory nature of this area of research, no specific hypotheses were put forward regarding these differences.

With regard to the responses endorsed when they themselves were being bullied (victimized), results of planned contrasts revealed that students with mild intellectual and specific learning disabilities did not differ significantly from their matched controls in their personal strategy use (all $ps > .01$), with one exception. Specifically, there was a significant difference between students with mild intellectual disabilities and general education students in terms of their endorsement of the strategy “reported it to an adult at school”. Students with mild intellectual disabilities reported that they used this strategy significantly more than their matched peers from among general education students, $t(162) = 3.69$, $p = .00$, $r = 0.28$ (see Figure 1).

With regard to how students respond when they witness others being bullied or victimized, results of planned contrasts revealed that students with mild intellectual disabilities differed from their matched controls in the reported use of only one strategy they would recommend to someone else being bullied. Specifically, students with mild intellectual disabilities reported that they would recommend that a person “get their friends to get back at” the bully significantly *more* than their general education peers, $t(193) = -2.91$, $p = .00$, $r = 0.24$ (see Figure 2). Additionally, students with specific learning disabilities used this same strategy (i.e., “get their friends to get back at” the bully) significantly *more* than students with mild intellectual disabilities, $t(193) = -2.92$, $p = .00$, $r =$

0.24. All other planned contrasts resulted in non-significant findings (i.e., $ps > .01$). Please see Table 7 for means and standard deviations.

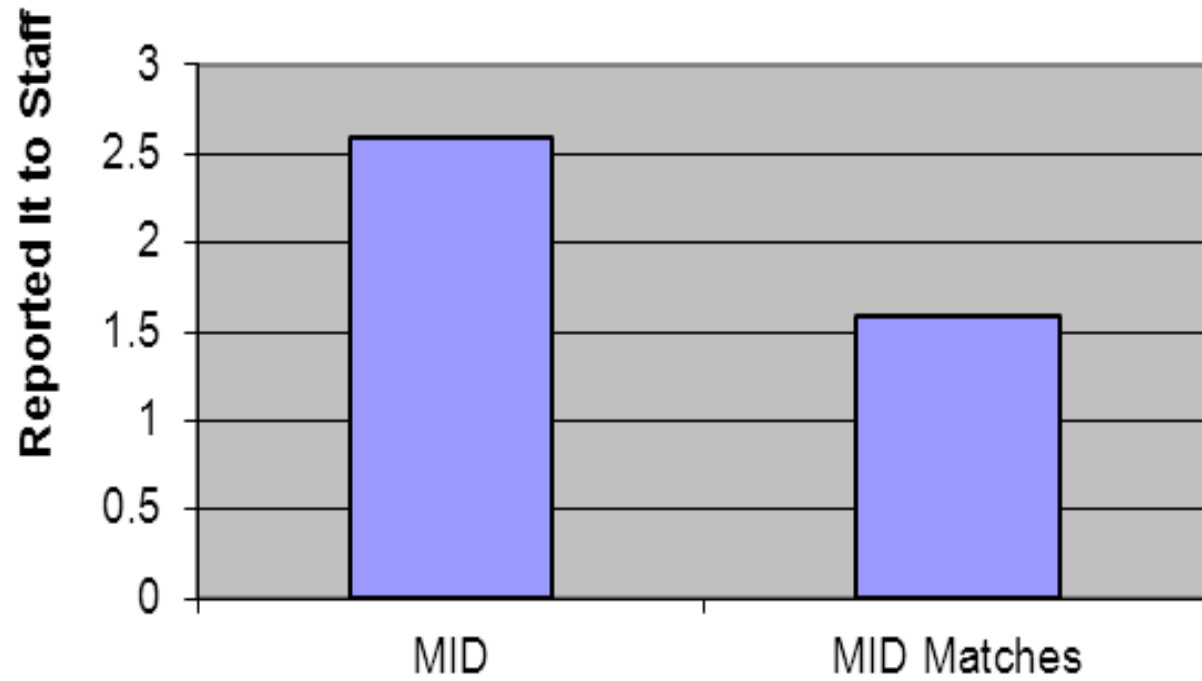


Figure 1. Mean total scores of students with and without Mild Intellectual Disabilities (MID) on “reported it to staff” strategy use.

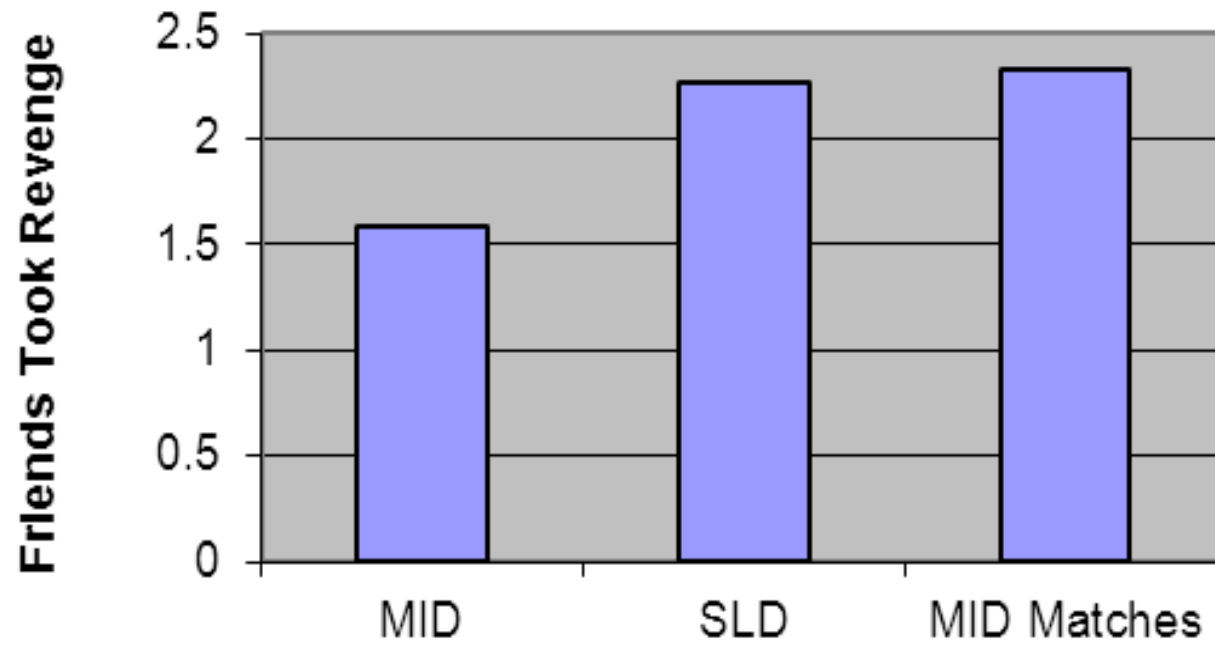


Figure 2. Mean total scores of students with Mild Intellectual Disabilities (MID), MID matches, and Specific Learning Disabilities (SLD) on “friends took revenge” strategy use.

Table 7

Means (M) and Standard Deviations (in parentheses) for Students with Mild Intellectual Disabilities (MID), Specific Learning Disabilities (SLD), and Matched Samples on Responses to Victimization

Variable	MID (n=94)	MID Matches	SLD (n=57)	SLD Matches
	M (SD)	M (SD)	M (SD)	M (SD)
Response to Victimization (to self)				
Told person to stop	3.36 (1.34)	2.83 (1.50)	3.27 (1.37)	3.31 (1.38)
Talked to person	2.57 (1.42)	2.27 (1.16)	2.41 (1.52)	2.75 (1.30)
Walked away	3.07 (1.33)	3.24 (1.43)	3.11 (1.52)	3.34 (1.21)
Ignored/avoided	3.27 (1.42)	3.24 (1.18)	2.95 (1.29)	3.25 (1.19)
Distracted person	1.98 (1.34)	2.05 (1.14)	2.51 (1.43)	2.38 (1.26)
Stayed home	1.79 (1.22)	1.51 (0.95)	1.70 (1.15)	1.94 (1.34)
Friends took revenge	1.88 (1.27)	2.41 (1.24)	2.08 (1.38)	2.47 (1.61)
Fought back physically	2.32 (1.42)	2.27 (1.38)	2.78 (1.51)	2.59 (1.76)
Found new friend(s)	2.54 (1.51)	1.93 (1.01)	2.65 (1.51)	2.59 (1.76)
Talked to adult at home	2.59 (1.60)	1.80 (1.19)	2.24 (1.40)	2.38 (1.48)
Talked to another youth	2.57 (1.35)	2.93 (1.40)	2.62 (1.46)	2.59 (1.41)
Reported it to staff	2.59 (1.52)	1.59 (1.02)	2.08 (1.30)	2.22 (1.31)
Friends solved problem	2.48 (1.38)	2.85 (1.35)	2.65 (1.48)	2.78 (1.38)
Talked to bully's friend	2.14 (1.38)	2.10 (1.32)	2.43 (1.52)	2.50 (1.37)
Did nothing	1.91 (1.22)	2.32 (1.40)	2.03 (1.28)	2.47 (1.61)
Response to Victimization (to others)				
Told person to stop	2.97 (1.33)	2.96 (1.20)	2.98 (1.53)	2.82 (1.32)
Talked to person	2.46 (1.28)	2.69 (1.15)	2.25 (1.30)	2.51 (1.21)
Talked to victim's friends	2.23 (1.34)	2.32 (1.20)	2.03 (1.25)	2.13 (1.13)
Walked away	2.49 (1.36)	2.57 (1.08)	2.38 (1.39)	3.03 (1.31)
Ignored/avoided person	2.58 (1.39)	2.57 (1.21)	2.17 (1.22)	2.76 (1.34)
Distracted person	2.11 (1.32)	2.13 (1.00)	2.08 (1.09)	2.28 (1.26)
Helped victim to escape	3.05 (1.50)	2.94 (1.12)	2.90 (1.36)	2.97 (1.25)

Table continues

Variable	MID (<i>n</i> =94) MID Matches		SLD (<i>n</i> =57) SLD Matches	
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Talked to victim later	3.00 (1.49)	3.09 (1.15)	2.98 (1.35)	3.15 (1.25)
Friends solved problem	2.52 (1.46)	2.58 (1.22)	2.68 (1.51)	2.56 (1.31)
Friends took revenge	1.58 (1.06)	2.26 (1.21)	2.33 (1.51)	2.13 (1.36)
Stayed home	1.34 (0.80)	1.42 (0.80)	1.43 (0.90)	1.74 (1.19)
Talked to adult at home	2.25 (1.49)	1.79 (1.06)	2.35 (1.53)	2.31 (1.42)
Talked to another youth	2.34 (1.37)	2.83 (1.28)	2.50 (1.43)	2.49 (1.30)
Reported it to staff	2.34 (1.45)	1.81 (1.08)	2.13 (1.47)	2.10 (1.33)
Talked about it to staff	2.25 (1.45)	1.67 (1.00)	2.20 (1.47)	1.97 (1.22)
Did nothing	2.02 (1.28)	1.92 (1.17)	1.85 (1.25)	2.64 (1.40)

A second focus in the present study was an examination of whether the interrelationships among various social experiences differed for students with mild intellectual disabilities, students with specific learning disabilities, and students without disabilities. Of particular interest were the relationships observed between (1) school belonging and victimization, (2) school safety and victimization, (3) peer victimization and involvement in high-risk behaviours (i.e., alcohol and drug use, and violent behaviour) and (4) bullying and involvement in high-risk behaviours (i.e., alcohol and drug use, and violent behaviour). Correlations were computed for each participant group (i.e., students with mild intellectual disabilities, students with specific learning disabilities, matched sample of general education students) and for boys and girls separately. A p -value of less than 0.01 was required for significance. Fischer's z -transformation was used to determine whether the correlations among these social experience variables differed significantly across groups. Effect sizes for the correlations were examined using r^2 -values to determine what proportion of the overall variability in participants' scores in each of the three groups was attributable to variability in the student outcome or school climate indices (Field, 2009). A summary of the correlation analyses may be found in Table 8.

Victimization and school belonging. The results of correlational analyses indicated that the negative relationship between school belonging and victimization was significant for both students with mild intellectual disabilities, $r(94) = -.49, p < .01, r^2 = .24$ and for MID and LD matches, $r(94) = -.55, p < .01, r^2 = .30$, and $r(57) = -.52, p < .01, r^2 = .27$, respectively, but not for students with specific learning disabilities, $r(57) = -.20, p > .01, r^2 = .04$. A comparison of the four independent r s, using Fischer's z transformation formula, indicated that there was no significant difference between students with mild intellectual disabilities and their matches ($z = .056$), but there was between students with specific learning disabilities and their matches with regard to this relationship ($z = -1.94$). Thus, for students with mild intellectual disabilities and for students without disabilities, reported

victimization was associated with lower feelings of school belonging. This relationship was non-significant for students with learning disabilities. However, a comparison of the independent r s for students with mild intellectual disabilities and students with specific learning disabilities indicated that there was no significant difference between these groups with regard to the relationship between school belonging and victimization ($z = -1.94$).

When correlations were computed separately for boys and girls, results indicated that the negative relationship between victimization and school belonging was statistically significant for both boys, $r(50) = -.54, p < .01, r^2 = .29$, and girls with mild intellectual disabilities, $r(44) = -.44, p < .01, r^2 = .19$, for boy, $r(50) = -.55, p < .01, r^2 = .30$, and girl MID matches, $r(44) = -.55, p < .01, r^2 = .30$, and for boy SLD matches, $r(33) = -.56, p < .01, r^2 = .31$. However, this relationship was not significant for boys or girls with specific learning disabilities, $r(33) = -.33, p > .01, r^2 = .11$, and $r(24) = .11, p > .01, r^2 = .01$, respectively, nor girl SLD matches, $r(24) = .21, p > .01, r^2 = .04$.

A comparison of the eight independent r s, using Fisher's z transformation formula, indicated that there were no significant sex differences in the relationship between victimization and school belonging for participants with mild intellectual disabilities ($z = -0.62$), MID matches ($z = 0.00$), or participants with specific learning disabilities ($z = -1.59$). There was, however, a significant sex difference for boy and girl SLD matches, ($z = -2.97$), with boys evidencing a stronger relationship between victimization and school belonging than girls ($z = 3.17$).

Victimization and school safety. The results of correlational analyses indicated that the negative relationship between school safety and victimization was significant for students with mild intellectual disabilities, $r(94) = -.26, p < .01, r^2 = .07$, students with specific learning disabilities, $r(57) = -.31, p < .01, r^2 = .10$ and for MID and LD matches, $r(94) = -.38, p < .01, r^2 = .25$, and $r(57) = -.64, p < .01, r^2 = .41$, respectively.

A comparison of the four independent r s, using Fischer's z transformation formula, indicated that the difference between students with mild intellectual disabilities and their matches ($z = 0.9$), and between students with specific learning disabilities and their matches ($z = 2.27$) were non-significant. Students with mild intellectual disabilities and students with specific learning disabilities also did not differ significantly with regard to this relationship ($z = 0.32$).

When these correlations were examined separately for boys and girls, results indicated that the negative relationship between victimization and school safety was statistically significant for boys with mild intellectual disabilities, $r(50) = -.39$, $p < .01$, $r^2 = .15$, boy MID matches, $r(50) = -.39$, $p < .01$, $r^2 = .15$, and boy SLD matches, $r(33) = -.67$, $p < .01$, $r^2 = .45$. This relationship approached significance for girl MID matches, $r(33) = -.34$, $p = .03$, $r^2 = .12$, and girl SLD matches, $r(24) = -.45$, $p = .02$, $r^2 = .20$, but was non-significant for boys and girls with specific learning disabilities, $r(33) = -.33$, $p < .01$, $r^2 > .01$, and $r(24) = -.26$, $p > .01$, $r^2 = .07$, respectively, and girls with mild intellectual disabilities, $r(44) = -.05$, $p > .01$, $r^2 = .00$.

A comparison of the eight independent r s, using Fisher's z transformation formula, indicated that there was no significant sex differences for participants with mild intellectual disabilities ($z = -1.69$), specific learning disabilities ($z = -0.27$), MID matches ($z = -0.25$), or SLD matches ($z = -1.15$) with regard to this relationship.

Victimization and high-risk behaviours. Of interest was whether reported victimization by peers was associated with greater high-risk behavior (drug use, alcohol use, violent behavior) among students.

With regard to reported drug use, correlational results indicated that this relationship was significant for students with mild intellectual disabilities, $r(91) = .30$, $p < .01$, $r^2 = .09$, and SLD matches, $r(57) = .43$, $p < .01$, $r^2 = .18$, but not for students with specific learning disabilities, $r(57) = -.01$, $p > .01$, $r^2 = .01$. Similar to the findings for the relationship

between alcohol use and victimization, the relationship approached significance for MID matches, $r(94) = .24$, $p = .02$, $r^2 = .06$. A comparison of the four independent r s, using Fischer's z transformation formula, indicated that there was no significant difference between students with mild intellectual disabilities and their matches ($z = 0.43$), nor between students with specific learning disabilities and their matches ($z = -2.44$) with regard to this relationship. There was also no significant difference between students with mild intellectual disabilities and specific learning disabilities in the strength of this relationship ($z = 1.85$).

When correlations were computed for boys and girls separately, results indicated that the relationship between victimization and drug use was statistically significant for boy SLD matches, $r(33) = .45$, $p < .01$, $r^2 = .20$, and girls with mild intellectual disabilities, $r(43) = .41$, $p < .01$, $r^2 = .17$. This relationship approached significance for girls with specific learning disabilities, $r(16) = -.50$, $p = .05$, $r^2 = .25$, but was non-significant for boys with mild intellectual disabilities, $r(48) = .28$, $p > .01$, $r^2 = .08$, boys with specific learning disabilities, $r(21) = .14$, $p > .01$, $r^2 = .02$, boy and girls MID matches, $r(50) = .26$, $p > .01$, $r^2 = .07$ and $r(44) = .18$, $p > .01$, $r^2 = .03$, respectively, and girl SLD matches, $r(24) = .05$, $p > .01$, $r^2 = .00$. A comparison of the eight independent r s, using Fisher's z transformation formula, indicated that there was no significant sex difference for participants with mild intellectual disabilities ($z = -0.68$), specific learning disabilities ($z = 1.9$), MID matches ($z = 0.39$), or SLD matches ($z = 1.53$) with regard to this relationship.

With regard to reported alcohol use, results of correlational analyses showed that the relationship between victimization and alcohol use was significant for students with mild intellectual disabilities, $r(93) = .31$, $p < .01$, $r^2 = .07$, and LD matches, $r(57) = .53$, $p < .01$, $r^2 = .28$, but not for students with specific learning disabilities, $r(56) = -.08$, $p > .01$, $r^2 = .01$. This relationship approached significance for MID matches, $r(94) = .25$, $p = .02$, $r^2 = .06$. A comparison of the four independent r s, using Fischer's z transformation formula, indicated

that there was no significant difference between students with mild intellectual disabilities and their matches ($z = .0.44$), but there was between students with specific learning disabilities and their matches with regard to this relationship ($z = -2.64$). There was also a non-significant difference in the strength of this relationship when comparing students with mild intellectual disabilities and students with specific learning disabilities ($z = 1.39$).

When correlations were computed for boys and girls separately, results indicated that the relationship between victimization and alcohol use approached significance for boys with mild intellectual disabilities, $r(49) = .35$, $p = .01$, $r^2 = .12$, and boy SLD matches, $r(33) = .38$, $p = .03$, $r^2 = .14$, but was non-significant for all other groups; namely, boys and girls with specific learning disabilities, $r(33) = .02$, $p > .01$, $r^2 = .00$, and $r(23) = -.27$, $p > .01$, $r^2 = .07$, respectively, boy and girl MID matches, $r(50) = .25$, $p > .01$, $r^2 = .06$, and $r(44) = .23$, $p > .01$, $r^2 = .05$, respectively, girls with mild intellectual disabilities, $r(44) = .24$, $p > .01$, $r^2 = .06$, and girl SLD matches, $r(23) = -.27$, $p > .01$, $r^2 = .07$. A comparison of the eight independent r s, using Fisher's z transformation formula, indicated that there was no significant sex difference for participants with mild intellectual disabilities ($z = 0.56$), specific learning disabilities ($z = 1.03$), MID matches ($z = 0.1$), or SLD matches ($z = 2.34$) with regard to this relationship.

With regard to reported violent behaviour, results of the correlational analyses indicated that the relationship between victimization and reported engagement in violent behaviour was significant for students with mild intellectual disabilities, $r(94) = .43$, $p < .01$, $r^2 = .18$, and for both MID and SLD matches, $r(94) = .34$, $p < .01$, $r^2 = .12$, and $r(57) = .56$, $p < .01$, $r^2 = .31$, respectively, but not for students with specific learning disabilities, $r(57) = .02$, $p = > .05$, $r^2 = .00$. A comparison of the four independent r s, using Fischer's z transformation formula, indicated that there was no significant difference between students with mild intellectual disabilities and their matches ($z = 0.71$), but there was a significant difference between students with specific learning disabilities and their matches with regard to the

strength of this relationship ($z = -3.18$). A comparison of students with mild intellectual disabilities and students with specific learning disabilities indicated a non-significant difference in the strength of the relationship between victimization and violent behaviour ($z = 2.56$).

Sex differences were also examined. The results of these correlational analyses indicated that the relationship between victimization and reported engagement in violent behaviour was statistically significant for boys and girls with mild intellectual disabilities, $r(50) = .45, p < .01, r^2 = .20$, and $r(44) = .43, p < .01, r^2 = .18$, respectively, girl MID matches, $r(44) = .48, p < .01, r^2 = .23$, boy SLD matches, $r(33) = .57, p < .01, r^2 = .32$, but only approached significance for boy MID matches, $r(50) = .30, p = .03, r^2 = .09$, and girl SLD matches, $r(24) = .41, p = .05, r^2 = .17$. The relationship was non-significant for boys and girls with specific learning disabilities, $r(33) = .12, p > .01, r^2 = .01$, and $r(24) = -.20, p > .01, r^2 = .04$. A comparison of the eight independent r s, using Fisher's z transformation formula, indicated that there was no significant sex difference for participants with mild intellectual disabilities ($z = 0.12$), specific learning disabilities ($z = 1.14$), MID matches ($z = -1.0$), or SLD matches ($z = 0.74$) with regard to this relationship.

Bullying and high-risk behaviours. A final series of correlational analyses were conducted to examine whether reported bullying (as assessed by the overall bullying composite) would be associated with greater involvement in high-risk behaviours, including drug use, alcohol use and violent behavior. With regard to reported drug use, the results indicated that the relationship between bullying others and reported drug use was significant for students with mild intellectual disabilities, $r(91) = .46, p < .01, r^2 = .21$, as well as for MID and SLD matches, $r(94) = .61, p < .01, r^2 = .37$, and $r(57) = .57, p < .01, r^2 = .32$, respectively, but only approached significance for students with specific learning disabilities, $r(57) = .35, p = .03, r^2 = .12$. For all groups, students who reported more bullying also reported more drug use. A comparison of these four independent r s, using

Fischer's z transformation formula, indicated that there was no significant difference in the magnitude of this relationship between students with mild intellectual disabilities and their matches ($z = -1.42$), between students with specific learning disabilities and their matches ($z = -1.47$), nor between students with mild intellectual disabilities and specific learning disabilities ($z = 0.76$).

When boys and girls were considered separately, results of these correlational analyses indicated that the relationship between bullying and drug use was statistically significant for both boys, $r(48) = .51$, $p < .01$, $r^2 = .26$, and girls with mild intellectual disabilities, $r(43) = .36$, $p < .01$, $r^2 = .13$, as well as for boy MID and SLD matches, $r(50) = .68$, $p < .01$, $r^2 = .46$, and $r(33) = .67$, $p < .01$, $r^2 = .45$, respectively. The relationship was non-significant for boys and girls with specific learning disabilities, $r(24) = .42$, $p > .01$, $r^2 = .18$, and $r(16) = .28$, $p > .01$, $r^2 = .08$, respectively, girl MID matches, $r(44) = .26$, $p > .01$, $r^2 = .07$, and girl SLD matches, $r(24) = -.24$, $p > .01$, $r^2 = .06$. A comparison of the eight independent r s, using Fisher's z transformation formula, indicated that there was no significant sex difference for participants with mild intellectual disabilities ($z = 0.86$) or specific learning disabilities ($z = 0.45$), but there was a significant sex difference for both MID matches ($z = 2.63$) and SLD matches ($z = 3.71$), with boys evidencing a stronger relationship between bullying and drug use than girls.

With regard to reported alcohol use, results of correlational analyses showed that the relationship between victimization and alcohol use was significant for students with mild intellectual disabilities, $r(93) = .45$, $p < .01$, $r^2 = .20$, as well as MID and SLD matches, $r(94) = .64$, $p < .01$, $r^2 = .41$, and $r(57) = .62$, $p < .01$, $r^2 = .38$, respectively, but not for students with specific learning disabilities, $r(56) = .12$, $p > .01$, $r^2 = .01$. A comparison of the four independent r s, using Fischer's z transformation formula, indicated that there was no significant difference between students with mild intellectual disabilities and their matches ($z = -1.84$), but there was a significant difference between students with specific

learning disabilities and their matches ($z = -3.13$) with regard to the strength of this relationship. There was a non-significant difference between students with mild intellectual disabilities and students with specific learning disabilities with regard to this relationship ($z = 2.1$).

When boys and girls were considered separately, results of these correlational analyses indicated that the relationship between bullying and alcohol use was statistically significant for boys with mild intellectual disabilities, $r(49) = .59, p < .01, r^2 = .35$, boy MID matches, $r(50) = .75, p < .01, r^2 = .56$, and boy SLD matches, $r(33) = .69, p < .01, r^2 = .48$. This relationship was non-significant for boys and girls with specific learning disabilities, $r(33) = .13, p > .01, r^2 = .02$, and $r(23) = .11, p > .01, r^2 = .01$, respectively, girls with mild intellectual disabilities, $r(44) = .15, p > .01, r^2 = .02$, girl MID matches, $r(44) = .10, p > .01, r^2 = .01$, and girl SLD matches, $r(24) = .27, p > .01, r^2 = .07$. With regard to sex differences, a comparison of the eight independent r s, using Fisher's z transformation formula, indicated that there was no significant sex difference for participants with mild intellectual disabilities ($z = 2.45$) specific learning disabilities ($z = 0.07$), or SLD matches ($z = 2.01$), but there was a significant sex difference for MID matches ($z = 4.08$), with boys evidencing a stronger relationship between bullying and alcohol use than girls.

With regard to reported violent behaviour, not surprisingly, all four correlations between the bullying composite and involvement in violent behaviour were statistically significant. Specifically, the relationship between reports of bullying others and reported violent behaviour was significant for students with mild intellectual disabilities, $r(94) = .73, p < .01, r^2 = .53$, students with specific learning disabilities, $r(57) = .57, p < .01, r^2 = .32$, MID matches, $r(94) = .64, p < .01, r^2 = .41$, and SLD matches, $r(57) = .62, p < .01, r^2 = .38$. Further, a comparison of the four independent r s, using Fischer's z transformation formula, indicated that there was no significant differences between students with mild intellectual disabilities and their matches ($z = 1.15$), students with specific learning disabilities and their

matches ($z = -0.4$), nor students with mild intellectual disabilities and students with specific learning disabilities ($z = 1.64$) with regard to the strength of this relationship. Thus, across groups, reports of engagement in frequent bullying were associated with reports of engagement in more violent behaviour.

Sex differences were also examined. The results of these correlational analyses indicated that the relationship between reported bullying and engagement in violent behaviour was statistically significant for all eight groups: boys, $r(50) = .78, p < .01, r^2 = .61$, and girls with mild intellectual disabilities, $r(44) = .63, p < .01, r^2 = .40$, boy, $r(50) = .63, p < .01, r^2 = .40$, and girl MID matches, $r(44) = .65, p < .01, r^2 = .42$, for boys, $r(33) = .62, p < .01, r^2 = .38$, and girls with specific learning disabilities, $r(24) = .52, p < .01, r^2 = .27$, and for boy, $r(33) = .61, p < .01, r^2 = .37$, and girl SLD matches, $r(24) = .82, p < .01, r^2 = .67$. A comparison of the eight independent r s, using Fisher's z transformation formula, indicated that there was no significant sex difference for participants with mild intellectual disabilities ($z = 1.42$), specific learning disabilities ($z = 0.52$), MID matches ($z = -0.16$), or SLD matches ($z = -1.57$) with regard to this relationship.

Table 8

Intercorrelations Between Indices for Students with Mild Intellectual Disabilities (MID), Students with Specific Learning Disabilities (SLD), and Matched Controls

Index	Victimization	Belonging	Safety	Alcohol Use	Drug Use	Violent Behaviour	Bullying
MID (<i>n</i> = 94)							
Victimization		-.49**	-.26**	.31**	.30**	.43**	
Boys		-.54**	-.39**	.35*	.28	.45**	
Girls		-.44**	-.05	.24	.41**	.43**	
Belonging	-.49**						
Boys	-.54**						
Girls	-.44**						
School Safety	-.26**						
Boys	-.39**						
Girls	-.05						
Alcohol Use	.31**						.45**
Boys	.35*						.59**
Girls	.24						.15
Drug Use	.30**						.46**
Boys	.28						.51**
Girls	.41**						.36**
Violent Behaviour	.43**						.73**
Boys	.45**						.78**
Girls	.43**						.63**
Bullying				.45**	.46**	.73**	
Boys				.59**	.51**	.78**	
Girls				.15	.36**	.63**	

** $p < .01$, * $p < .05$

Table continues

Index	Victimization	Belonging	Safety	Alcohol Use	Drug Use	Violent Behaviour	Bullying
	SLD (<i>n</i> = 57)						
Victimization		-.20	-.31**	-.08	-.01	.02	
Boys		-.33	-.33	.02	.14	.12	
Girls		-.11	-.26	-.27	-.50*	.20	
Belonging	-.20						
Boys	-.33						
Girls	-.11						
School Safety	-.31**						
Boys	-.33						
Girls	-.26						
Alcohol Use	-.08						.12
Boys	.02						.13
Girls	-.27						.11
Drug Use	-.01						.35*
Boys	.14						.42
Girls	-.50*						.28
Violent Behaviour	.02						.57**
Boys	.12						.62**
Girls	-.20						.52**
Bullying				.12	.35*	.57**	
Boys				.13	.42	.62**	
Girls				.11	.28	.52**	

** $p < .01$, * $p < .05$

Table continues

Index	Victimization	Belonging	Safety	Alcohol Use	Drug Use	Violent Behaviour	Bullying
MID matches (<i>n</i> = 94)							
Victimization		-.55**	-.38**	.25*	.24*	.34**	
Boys		-.55**	-.39**	.25	.26	.30*	
Girls		-.55**	-.34*	.23	.18	.48**	
Belonging	-.52**						
Boys	-.55**						
Girls	-.55**						
School Safety	-.38**						
Boys	-.39**						
Girls	-.34*						
Alcohol Use	.25*						.64**
Boys	.25						.75**
Girls	.23						.10
Drug Use	.24*						.61**
Boys	.26*						.68**
Girls	.18						.26
Violent Behaviour	.34**						.64**
Boys	.30*						.63**
Girls	.48**						.65**
Bullying				.64**	.61**	.64**	
Boys				.75**	.68**	.63**	
Girls				.10	.26	.65**	

** $p < .01$, * $p < .05$

Table continues

Index	Victimization	Belonging	Safety	Alcohol Use	Drug Use	Violent Behaviour	Bullying
				SLD matches (<i>n</i> = 57)			
Victimization		-.52**	-.64**	.53**	.43**	.56**	
Boys		-.56**	-.67**	.38*	.45**	.57**	
Girls		.21	-.45*	-.27	.05	.41*	
Belonging	-.52**						
Boys	-.56**						
Girls	.21						
School Safety	-.64**						
Boys	-.67**						
Girls	-.45*						
Alcohol Use	.53**						.62**
Boys	.38*						.69**
Girls	-.27						.27
Drug Use	.43**						.57**
Boys	.45**						.67**
Girls	.05						-.24
Violent Behaviour	.56**						.62**
Boys	.57**						.61**
Girls	.41*						.82**
Bullying				.62**	.57**	.62**	
Boys				.69**	.67**	.61**	
Girls				.27	-.24	.82**	

** $p < .01$, * $p < .05$

CHAPTER 6 DISCUSSION

As an aide to the reader, the final chapter of this dissertation provides a brief overview of the study, including a statement of the problem and a review of the methods involved. The majority of the chapter is devoted to a summary and discussion of the hypotheses and research questions, and to a discussion of the pertinence of the results for the role of disability status and sex in the expression of bullying and victimization (including racial discrimination, gender harassment, and sexual imposition), high-risk behaviours and sense of belonging, as well as responses to peer victimization (both as victims and witnesses) within the secondary school setting.

Purpose of the Study

The few studies assessing victimization in persons with disabilities generally support the finding that adolescents with disabilities evidence a rate of victimization that is two to three times that higher than adolescents without disabilities (e.g., Morrison & Furlong, 1994; O'Moore & Hillery, 1989; Whitney et al., 1992). This research, however, has historically combined all students with varying disabilities together in one group, and has often been plagued with small samples sizes and/or lack of comparison samples. Moreover, when students with disabilities who attend school in segregated or specialized settings are distinguished from those who are enrolled in inclusive settings, differences are far more likely to be found for segregated rather than integrated students (e.g., Rose 2010). More recently, researchers have looked more specifically at adolescents with specific learning disabilities and/or AD/HD (McNamara et al., 2008; Sabornie, 1994). Here too the evidence generally indicates that adolescents with specific learning disabilities report higher levels of victimization than their peers without disabilities (however, Kaukiainen et al., 2002 did not). No such research has been conducted with adolescents with mild intellectual disabilities. The present study extended this research to include adolescents with mild intellectual disabilities, whose self-reported prevalence rates were compared to

rates reported by both adolescents with specific learning disabilities, and by an age-, sex-, and school-matched sample of adolescents without disabilities. Second, this study extended the investigation of victimization and perpetration to include, not only bullying victimization, but also racial discrimination, gender harassment, and sexual imposition victimization. Third, this study examined feelings of belonging, engagement in high-risk behaviours, and responses to victimization (towards self and others) in adolescents with mild intellectual disabilities and specific learning disabilities, as compared with their peers without disabilities. Fourth, this study examined these differences between two groups of students in inclusive (as opposed to segregated or mixed) settings, and finally, this study examined the relationships between victimization, perpetration, high-risk behaviours, and feelings of belonging, and compared the strength of these associations for adolescents with mild intellectual and specific learning disabilities and their peers without disabilities. This study did not attempt to offer cause and effect answers to the relationships among these variables, but to extend the findings of previous correlational studies conducted in the fields of special education and psychology. Results are compared to other community/school-based studies that have examined these relationships.

Internal Consistency Reliability of Measures

The results of this study generally support the utility of using the various scales included in the *Safe School and Social Responsibility (Adapted) Survey for Secondary Students* with adolescents with specific and mild intellectual disabilities. The internal reliability of the various scales was found to be adequate, although the scales tapping gender harassment (victimization), drug use and feelings of belonging were less than .80 for students with mild intellectual disabilities, specific learning disabilities, or both, depending on the variable of interest (please refer to Table 2). Coefficient alphas for students with specific learning and mild intellectual disabilities were found to be similar to each other ($r_{S\alpha} = .67$ to $.91$, respectively), and generally equivalent to those for students

without disabilities ($r_{\alpha} = .76$ to $.95$), with the exception of the aforementioned gender harassment (victimization), drug use, and feelings of belonging scales. The self-report measures obtained from both students with specific learning disabilities and students with mild intellectual disabilities were quite reliable overall. Students demonstrated no difficulties with language and/or communication, clearly understood the directions, seemed accurate in their reporting of items (although, in two cases, there was some minor definitional confusion about sexual orientation and race/ethnicity that required a brief discussion of definitions), and many requested that they be allowed to complete the questionnaires independently at their own pace (i.e., instead of having the researcher read aloud the items).

Analyses of Mean Group Differences

The primary focus of this study was to examine differences among integrated adolescent students with specific learning disabilities, students with mild intellectual disabilities, and students without disabilities in terms of level of victimization (i.e., bullying, racial discrimination, gender harassment, and sexual imposition), responses to victimization, perpetration (i.e., bullying, racial discrimination, gender harassment, and sexual imposition), feelings of school safety, engagement in high-risk behaviours, and feelings of school belonging, respectively.

Differences in victimization. Contrary to the hypothesis, results of this study showed that adolescents with specific learning disabilities or mild intellectual disabilities reported levels of victimization that did not differ significantly from that reported by their peers without disabilities. As well, no significant differences in reported victimization were observed across the two groups of students with disabilities. Rather, reported victimization was similar across all groups. This was true for overall victimization and for specific types of victimization (physical, verbal, social, racial discrimination, gender harassment, and sexual imposition), and for both boys and girls.

At first glance, these results seem to contradict previous studies comparing heterogeneous groups of students with disabilities (e.g., groups including students with physical, emotional, behavioural, observable and non-observable, high and low incidence disabilities) from which a general conclusion has been that children with special needs are at greater risk of peer victimization. However, these findings are consistent with prior research by Kaukiainen et al. (2002) showing that students with specific learning disabilities did not report a higher level of victimization compared to their classmates without disabilities and with studies showing that students with disabilities in inclusive settings reported a lower level of victimization than students with disabilities in segregated settings (O'Moore & Hillery, 1989; Rose et al., 2009).

There are several plausible reasons why the students with disabilities included in this study did not report greater peer victimization than their peers without disabilities. First, Rose et al. (2009) suggest in their review of this literature, students with disabilities may be more likely to be targets of peer bullying as a result of the severity or "visibility" of their disability and, relatedly, whether or not they are integrated or segregated within the general school population. The students with special needs who were investigated in this study were categorized as having "high-incidence" disabilities, generally did not evidence observable disabilities, and did not attend segregated schools (where they would be more likely to be placed if they demonstrated highly problematic behaviours). Accordingly, one important conclusion to be reached from the present results is that students identified with mild intellectual disabilities or specific learning disabilities are *not necessarily* at greater risk for peer victimization when placed within an inclusive school setting. This is not to say that students with special needs are not targets of peer victimization per se; some of them are, even in the present study. Indeed, even in the present study, approximately 1.6% of students with specific learning disabilities and 3.2% of students with mild intellectual disabilities reported that they were victimized by peers every week or more, as compared

with 5.3% and 1.1% of their matched peers in the general population. However, the present results suggest that they are not more likely to be victimized by peers than students without disabilities. As Rose et al. (2010) suggest, further research is needed that compares the victimization rates of students with disabilities who are enrolled in inclusive versus self-contained classrooms and of students with severe or visible versus less observable disabilities.

A second reason why the students with disabilities investigated in the present study did not demonstrate greater risk of peer victimization than their peers without disabilities may have to do with the school district considered in the present study. Participants in the present study were taken from a large-scale, school-based assessment of the social experiences of secondary students from 18 different high schools in a single urban school district. However, it is noteworthy that this particular district has long mandated a focus on positive interpersonal relations as part of a provincial focus on “social responsibility” as one of four foundational skills for learning (along with reading, writing and numeracy). Accordingly, the district has supported a variety of efforts at both the elementary and secondary levels to address issues of bullying, racial discrimination, etc. The general success of their efforts in these areas may also have contributed to the finding that students with mild intellectual or specific learning disabilities were at no greater risk of peer victimization than their peers without disabilities. Although future research is needed to explore school-context effects on peer victimization, results of the present study clearly demonstrate that students with mild intellectual or specific learning disabilities need not be at greater risk for victimization by peers when integrated into the general student body.

Of additional interest in the present study was an examination of differences in how students respond to peer harassment that they receive (as a victim) or that they observe (as a witness). No specific hypotheses were made, as the only prior study conducted on this issue to date was a qualitative, retrospective study of adults with developmental

disabilities (Marini et al., 2001). Results of analyses in the present study indicated two differences among the four groups of students -- one for response to victimization as a victim and one for response to victimization as a witness. Specifically, students with mild intellectual disabilities indicated that they “reported their victimization to an adult at school” significantly more often than did their peers without disabilities. In terms of response to victimization (as a witness), students with mild intellectual disabilities indicated that they would recommend that the victim “get their friends to get back at” the bully significantly more than did their peers without disabilities. Interestingly, both of these “preferred” strategies place the onus of responsibility on someone else (i.e., either a school staff or a friend of the victim). Perhaps owing to difficulties with social skills, as well as social and cognitive problem-solving skills, it is possible that students with mild intellectual disabilities would rather enlist the help of others, who might be more knowledgeable in how to respond to the victimization, instead of involving themselves directly. Additionally, perhaps because their social networks contain fewer peers than students without disabilities (Rosen & Burchard, 1990; Wenz-Gross & Siperstein, 1996), students with mild intellectual disabilities did not enlist the help of their own friends or peers, but instead enlisted the help of adults or someone else’s (i.e., the victim’s) friends. Finally, it is possible that, due to difficulties understanding age-appropriate social norms (e.g., limited “theory of mind”), students with mild intellectual disabilities (in contrast to students in the other two groups) might not understand that it’s uncool to “tattle” or talk to school staff about bullying/victimization.

Differences in perpetration. Contrary to hypotheses, results of the present study showed that adolescents with specific learning disabilities or mild intellectual disabilities did not report greater perpetration towards peers than did adolescents without disabilities. This was true for overall perpetration and for specific types of perpetration (physical, verbal, social, racial discrimination, gender harassment, and sexual imposition). Furthermore, results did not reveal any significant differences in reported perpetration between the two

groups of students with special needs. Although a small number of recent studies have demonstrated that students with disabilities are more likely than their general education peers to be both victims and perpetrators of bullying (Kaukiainen et al., 2002; Rose et al., 2009), and that students with high-incidence disabilities specifically are identified as bullies twice as often as students without disabilities (Rose et al., 2009; Woods & Wolke, 2004), these studies compared heterogeneous groups of students with disabilities (e.g., groups including students with physical, emotional, behavioural, observable and non-observable, and/or high and low incidence disabilities) with their peers without disabilities. Results of the present study, considering only students with mild intellectual disabilities and specific learning disabilities specifically and separately, are consistent with research by O'Moore and Hillery (1989) who found that students with specific learning disabilities attending inclusive schools (as were the participants included in the present study) reported similar levels of bullying perpetration as their classmates without disabilities. Thus, for male and female students with high-incidence disabilities (i.e., identified with either mild intellectual disabilities or specific learning disabilities) attending inclusive schools, self-reports of perpetration of bullying, discrimination, and harassment are at similar levels to those of their peers without disabilities. Specifically, in the present study, approximately 3.5% of students with specific learning disabilities and 3.2% of students with mild intellectual disabilities reported that they bullied their peers every week or more, as compared with 5.3% and 1.1% of their matched peers in the general population.

Differences in school safety and belonging. Given a lack of research on school safety and belonging with individuals with specific learning disabilities and mild intellectual disabilities, the present study examined whether or not students with mild intellectual disabilities, students with specific learning disabilities, and students without disabilities differed in terms of their self-reported feelings of school safety and belonging, with no predictions regarding outcomes. Results indicated no significant difference between

groups of adolescents (i.e., students with mild intellectual disabilities, specific learning disabilities, and students without disabilities) in terms of either outcome variable. This pattern of results was evident for both male and female students. The present findings regarding school safety are consistent with those reported by Morrison et al. (1994) who further speculated that both general education students and students with academic and behavioural difficulties who reported greater feelings of safety at school were those who also reported experiencing less violence and perceived greater access to social support. Given the present findings of non-significant differences in reported victimization across groups (as summarized above), it is perhaps not surprising that the three groups compared also did not differ in related feelings of safety and belonging at school.

Differences in high-risk behaviours. A final series of analyses examined whether there was a significant difference in reported engagement in high-risk behaviours (i.e., alcohol and drug use, violent behaviour) among adolescents with specific learning disabilities, as compared to adolescents with mild intellectual disabilities and adolescents without disabilities. No specific a priori hypotheses were made regarding these differences, given that previous research investigating high-risk behaviour in adolescents with specific learning disabilities has yielded mixed results as to whether or not students with specific learning disabilities engage in a higher level of risk-taking behaviours than their peers without disabilities (e.g., Elmquist et al., 1992; Katims et al., 1996; Maag et al., 1994; McNamara et al., 2008; Wong et al., 1998). As noted previously, these mixed results may in part be attributed to methodological differences across studies, including differing groups of students with disabilities considered, lack of matched samples, small sample sizes, and differences in class settings (e.g., inclusive versus segregated). Accordingly, results of the present study, attempting to address these methodological issues by comparing matched samples of students formally identified with either mild intellectual disabilities or specific learning disabilities, are important in demonstrating that such high-incidence disabilities do

not carry with them an increased likelihood of high-risk behaviour for either boys or girls. Future research, therefore, needs to address why some students (with and without disabilities) tend to engage in more high-risk behaviour. As noted by previous researchers, however, although groups may not report dissimilar levels of engagement in high-risk behaviours, the pathways by which they engage in these high-risk behaviours may be significantly different (Katims et al., 1996; McNamara et al., 2008).

Interrelationships among Social Experience Variables

Victimization and feelings of school belonging. As a second focus of the present study, correlational analyses were conducted to explore the relationships among the various outcomes considered. First examined was the association between victimization and feelings of school belonging for adolescents with specific learning disabilities and mild intellectual disabilities, as compared to their peers without disabilities. Results demonstrated that, for both adolescents with mild intellectual disabilities and for students without disabilities, greater victimization was associated with less positive feelings of school belonging. For students with specific learning disabilities, this pattern of relationship was observed for boys but not for girls. Thus, consistent with a growing body of work that shows a negative relationship between feelings of school belonging and victimization (e.g., Brockenborough et al., 2002; Furlong et al., 1995), students who are victimized are (not surprisingly) less likely to feel that they belong at school. Given this general finding, the fact that this relationship failed to emerge for girls with learning disabilities is particularly noteworthy. An examination of available descriptive data, however, points to several plausible explanations for this lack of significant relationship. Specifically, girls with specific learning disabilities comprised the smallest group in the dataset (e.g., $n = 24$). As such, it is possible that, due to insufficient power, an existing relationship was simply not detected. Furthermore, this group, more so than the other groups considered, evidenced little variability in their victimization scores, leaving little to correlate.

Victimization and feelings of school safety. Results of correlational analyses exploring the association between victimization and feelings of school safety among adolescents with specific learning disabilities and mild intellectual disabilities as compared to their peers without disabilities, revealed significant and negative correlations between reported victimization and feelings of school safety for students with mild intellectual disabilities and students without disabilities, although this relationship only approached significance for students with specific learning disabilities. Again, an examination of descriptive data points to several plausible explanations for this lack of significant relationship. Specifically, girls and boys with specific learning disabilities comprised the smallest groups in the dataset (i.e., $n_s = 33$ and 24 , respectively). As such, it is possible that, due to insufficient power, a real, statistically significant relationship was simply not detected. Furthermore, this group, more so than the other groups considered, evidenced little variability in their victimization (both boys and girls) and safety scores (girls only), again leaving little to correlate. Follow-up Fischer's z transformation analyses, comparing the strength of correlations among groups, certainly lend credence to these hypotheses.

The finding of a significant, negative relationship between victimization and school safety is consistent with existing studies conducted with adolescents without disabilities (e.g., Greenberg et al., 2003), and may help clarify the one study that has been conducted with adolescents with disabilities (Morrison, et al., 1994). Specifically, Morrison et al. found an unexpected *positive* relationship between perceptions of school safety and reported violence for a small sample of students with severe learning disabilities ($n=19$), and hypothesized that these students' higher than expected perceptions of school safety may have been influenced by their placement in relatively safe, self-contained classrooms. In contrast, the adolescents with specific learning disabilities included in the present study were enrolled in inclusive high school classrooms.

Victimization and engagement in high-risk behaviours. Correlational analyses also examined the association between victimization and engagement in high-risk behaviours (i.e., drug use, alcohol use, and violent behaviour) for adolescents with specific learning disabilities and mild intellectual disabilities as compared to their peers without disabilities. Results indicated a significant and positive relationship between reported drug use and victimization for students with mild intellectual disabilities and SLD matches. This relationship approached significance for MID matches, but was non-significant for students with specific learning disabilities. In summary, results demonstrated that, for both adolescents with mild intellectual disabilities and for students without disabilities, greater victimization was associated with greater drug use. For students with specific learning disabilities, this pattern of relationship was not observed. An examination of descriptive data points to several plausible explanations for this non-significant relationship. Specifically, students with specific learning disabilities comprised the smallest groups in the dataset (i.e., $n = 21$ for boys and $n = 16$ for girls, respectively). As such, it is possible that, due to insufficient power, a real, statistically significant relationship was simply not detected. Furthermore, these groups, more so than the other groups considered, evidenced little variability in their victimization (both boys and girls) and drug use scores (girls only), leaving little to correlate. Follow-up Fischer's z transformation analyses, comparing the strength of correlations among groups (i.e., between groups and between groups \times sex), lend some support to these hypotheses.

Results of analyses examining the strength of association between alcohol use and victimization were somewhat different from the association found between victimization and drug use. Specifically, a significant and positive relationship between reported alcohol use and victimization was found for students with mild intellectual disabilities and for students without disabilities. And once again, this relationship was non-significant for students with specific learning disabilities. In this case, however, follow-up Fisher's z -transformation

analyses further confirmed a significant difference in the association between victimization and alcohol use between students with mild intellectual disabilities and students with specific learning disabilities, with the former group reporting a significant association between victimization and greater alcohol use, while the latter group did not.

A third set of correlational analyses examining the association between high-risk behaviours and victimization focused on violent behaviour. Results of these analyses were similar to those found between victimization and drug use, demonstrating that, for both adolescents with mild intellectual disabilities and for those without disabilities, greater victimization was associated with greater engagement in violent behaviour. For students with specific learning disabilities, however, this pattern was not observed. An examination of descriptive data, however, points to several plausible explanations for this lack of significant relationship. As noted previously, students with specific learning disabilities comprised the smallest groups in the dataset (i.e., $n = 33$ for boys and $n = 24$ for girls, respectively), making detection of a significant relationship less likely due to limited power. Furthermore, these groups, more so than the other groups considered, evidenced little variability in their victimization (both boys and girls) and reported engagement in violent behaviour (boys only), again leaving little to correlate. The findings obtained in the present study for students with mild intellectual disabilities in particular are consistent with results from research conducted with students in general education that show a positive association between engagement in at least two types of high-risk behaviours – carrying weapons and fighting and previous exposure to victimization and violence (Brockenbrough et al., 2002; DuRant et al., 1994, 1995; Zins et al., 2004a). As for students with specific learning disabilities, it is not entirely certain why findings from this study did not find a similar association, but the arguments presented above do offer some plausible explanations. Future research will prove beneficial in testing out these hypotheses.

Bullying and engagement in high-risk behaviours. A final series of correlational analyses examined the association between bullying and engagement in high-risk behaviours (i.e., drug use, alcohol use, violent behaviour) for adolescents with specific learning disabilities and mild intellectual disabilities as compared to their peers without disabilities. Findings indicated a significant and positive relationship between reported bullying and both drug use and violent behaviour for all three groups. That is, regardless of disability status, students who reported more bullying of others also reported more drug use and violent behavior (i.e., while this relationship only approached significance for students with specific learning disabilities, follow-up Fisher's z transformation analyses confirmed a lack of difference in the strength of this association between the two groups). The relationship between alcohol use and bullying, however, was significant only for students with mild intellectual disabilities and for students without disabilities, and non-significant for students with specific learning disabilities. Again, students with specific learning disabilities comprised the smallest groups in the dataset (i.e., $n = 33$ for boys and $n = 23$ for girls, respectively), making it possible that there was insufficient power to detect this relationship. With the exception of the non-significant relations observed between bullying and alcohol use for students with specific learning disabilities, these findings are consistent with research conducted with general education students that indicates that adolescents' own social experiences, as a recipient or perpetrator may influence their involvement in high-risk behaviours (Brockenbrough et al., 2002; DuRant et al., 1994; Flynt & Collins Morton, 2004; Zins et al., 2004a).

There were two significant sex differences observed among these correlations between bullying and high-risk behaviours. Specifically, for students without disabilities, the association between bullying behaviour and drug use was significantly stronger for boys than it was for girls. Additionally, for MID matches, the association between alcohol use and bullying was significantly stronger for boys than for girls. These results, however, are

not surprising given that research for adolescents in the general population shows consistent sex differences in adolescents' substance use, with boys generally drinking more frequently and intensely than girls (Griffen, Scheier, Botvin, & Diaz, 2000), and that at least a small body of research suggests that boys tend to demonstrate a higher prevalence of drug use, owing to the impact of various psychosocial factors such as increased exposure to "deviant" peers and decreased parental monitoring when compared to their female counter-parts (Svensson, 2003). What is uncertain is why these findings do not hold true for adolescents with mild intellectual disabilities or specific learning disabilities. Exploring sex differences in substance use (across or within disability groups) was not a focus of the present study. Future research may prove beneficial in more closely examining these differences.

Strengths and Limitations of the Study

There are several limitations of this study that merit attention. One of the most difficult issues in conducting empirical research with individuals with disabilities is establishing standardized and/or agreed upon criteria for inclusion. As indicated in Chapter 2, few researchers use established criteria for specific learning disabilities and/or mild intellectual disabilities to identify students with various disabilities within their samples. Relative to the methodology of most previous studies, a methodological strength of this study is the inclusion of only students with disabilities that have a formal educational identification (i.e., mild intellectual disability) or diagnosis (i.e., specific learning disability), and with no comorbid identifications/diagnoses. In terms of future research, however, it would be beneficial to have access to the details of these students' files, including data regarding the nature and/or levels of cognitive, academic, and/or adaptive functioning, any comorbid diagnoses, as well as greater detail on class placement (e.g., resource room versus inclusive classroom, number of resource blocks). Although it was the researchers' intent to collect information regarding the degree of integration for each student with special

needs included in the present study, this information was not available for those students who completed the survey as part of the district-wide administration (i.e., the researchers requested that classroom teachers collect this information on the day of the district-wide survey administration, but it, in fact, was not collected). As such, the researcher is uncertain as to the degree to which these students were integrated into their respective classrooms. However, a reasonable estimate would be that the students received one or two blocks of resource support per day.

As is typical with administrations of large-scale surveys, few students with mild intellectual disabilities and specific learning disabilities were included in the original data sampling. One of the strengths of the present study is the consideration of students formally identified as having either specific learning disabilities or mild intellectual disabilities, matched in terms of school, sex, and grade level with students without disabilities. However, although these two disability categories are considered “high-incidence”, they represent only a small portion of the school population⁴.

Despite the fact that the sample size of this study was considerably larger than that reported in previous school-based studies investigating the social experiences of students with intellectual disabilities in particular, it was still small compared to studies conducted with adolescents without disabilities for the aforementioned reasons. As a result, the final sample was necessarily limited in size (especially when sex was also considered as an independent variable), resulting in lower statistical power to detect possible significant differences, a greater likelihood of Type II errors and the possible under-detection of true differences between groups. The small sample size also prevented an examination of

⁴ In their roundtable report on special needs funding, the BC Ministry of Education states that the prevalence of students identified with high-incidence disabilities is fairly stable and constant across school districts, and currently stands at approximately 6% of the entire student population. When considering students with specific learning disabilities and mild intellectual disabilities in particular, prevalence is even lower and stands at approximately 4% and 0.5 %, respectively (BC Ministry of Education, 2007).

possible grade differences. Larger scale studies over multiple districts would be preferable in future research, although such samples would be difficult to obtain.

This study did not attempt to determine cause-effect relationships among victimization, perpetration, feelings of school safety, belonging, and engagement in high-risk behaviours. Rather, it was designed to extend the findings of previous research conducted in the fields of special education and psychology, by examining the social experiences of adolescents who have been formally identified by schools to display specific learning disabilities and mild intellectual disabilities and who are integrated in multiple urban secondary schools. The present study is unique in its consideration of reported levels of various types of peer victimization and perpetration (in addition to bullying), as well as students' responses to victimization. Additionally, this study provided a first look at a range of high-risk behaviours and feelings of school belonging in adolescents with mild intellectual disabilities as well as those with specific learning disabilities. Importantly, this study examined these relationships with samples of students formally identified by schools as having specific learning disabilities or mild intellectual disabilities, as compared with a grade-, and sex- matched sample of adolescents without disabilities from the same schools. The strength of the design of the study lends confidence to the significance and meaningfulness of its results.

Future Research

With the increasing movement towards integration of children and youth with disabilities into inclusive schools, it is imperative that we give them a voice into decisions that affect their safe and positive learning environment. This study accomplished this very important task, but additional research is needed to investigate the relationships among the variables described above. Further research examining the relationships among victimization, perpetration, disability status and associated socio-environmental variables in adolescents with specific learning disabilities and mild intellectual disabilities is warranted

to clarify the nature of victimization and perpetration. Of particular interest in future research is identifying some of the potentially varying factors causing and/or exacerbating victimization and/or perpetration in these populations (i.e., multiple pathways), and developing improved methods of supporting these individuals through prevention and intervention programs.

Future research would also benefit from a more detailed analysis of the impact of particular social contexts in which students with disabilities function (e.g., number of resource blocks, inclusive versus resource classrooms, etc.). Given evidence reviewed above that students with disabilities in segregated settings report greater victimization than students in more inclusive settings, a better understanding of the impact of such placements on student social experiences is warranted, and could have significant implications for the design of intervention and prevention programs. It would also provide additional information on how school personnel might better foster inclusion in their schools and classrooms.

Additionally, although the present study was conducted in a large, multi-ethnic urban school district using an adequate sample size of formally identified and matched sample of two groups of students with high-incidence disabilities, replication of this study in other geographic locations would help to ensure the consistency of findings with other adolescent populations (e.g., rural populations). As noted previously, data for the present study were collected in an urban school district that has long supported school-based efforts to foster positive interpersonal relationships in accord with a province-wide Ministry of Education focus on social responsibility as a foundational skill for schools. In other words, students surveyed in the present study may feel more safe, experience greater school belonging, and report lower levels of victimization, perpetration, and engagement in high-risk behaviours because of the district-wide efforts that are embedded in their curriculum and school/classroom environment.

When the results of this study are compared to a national survey of students in grades 6 through 10 (Public Health Agency of Canada, 2011), the rates of both reported victimization and bullying across groups (i.e., regardless of disability status) appears to be similar to those reported in the national study⁵. More specifically, the 2009/2010 PHAC survey found that between 3% to 8% of students reported being victimized once a week or more and that between 1% to 4% of students reported bullying others once a week or more (depending on grade and gender), whereas the rates for the present study ranged from 1% to 5% for both reported victimization and perpetration (depending on disability status). Similarly, between 7% to 16% of students in the national survey and between 4% and 10% of students in the present study reported that they did not feel safe at school. In contrast, rates of reported school belonging between the two studies appear to be considerably different; namely, that between 30% and 45% of students in the national survey did not share a sense of school belonging (depending on grade and gender), whereas only 15% to 23% of students in the present study (depending on disability status) reported this lack of school belonging. It should be noted, however, that the age groups captured in the two studies are somewhat different, and as such, may play a role in the differences noted above.

Although future research is needed to determine to what extent school- and district-wide efforts to reduce bullying, victimization, discrimination, etc. contribute to the positive results observed in the present study, the present findings nevertheless demonstrate that students with mild intellectual or specific learning disabilities need not be a greater risk when integrated into regular classroom settings. Furthermore, given the unusual pattern of findings for students with specific learning disabilities, future research might also give consideration to examining subtypes of learning disabilities and their potential impact on

⁵ These findings are also similar to those reported in a national study examining prevalence rates of bullying and victimization among youth in Canada (Volk, Craig, Boyce, & King, 2003).

student experiences (e.g., students with language-based versus students with nonverbal learning disabilities).

Finally, future research should explore changes in the social experiences of students with special needs and the factors that contribute to these experiences using prospective or longitudinal study designs to allow for an examination of directionality and/or buffering effects in the relationships among the variables included in this study. As with adolescents without disabilities, further research with students with particular disabilities must be undertaken to determine the exact nature of these relationships. These studies must explore the interactions or indirect effects of various socio-environmental factors with victimization and perpetration to determine how they may cause and/or exacerbate victimization and perpetration in adolescents with specific learning and mild intellectual disabilities.

Conclusions

This study investigated self-reports of victimization, responses to victimization, bullying, feelings of school safety and belonging, as well as engagement in high-risk behaviours in a school-based sample of adolescents with mild intellectual and specific learning disabilities, and compared them to those of a matched sample of adolescents without disabilities. Given arguments in the literature, suggesting that students with disabilities are at greater risk for negative social experiences with peers, the present findings were both somewhat surprising and a cause for celebration, in that students with mild intellectual disabilities and specific learning disabilities did not differ in their reports of victimization, perpetration, feelings of safety/belonging, or high risk behaviour as compared to their peers without disabilities. Thus, students with specific learning disabilities and/or mild intellectual disabilities who are integrated within the regular educational setting do not appear to be at greater risk for negative behavior, contrary to current expectations of researchers and educators in the fields of special education and psychology.

It is important to underscore the fact that students included in this study were adolescents with non-observable, high-incidence disabilities who were recruited from inclusive schools. This is in stark contrast to previous research which has combined together students of varying disabilities into one group, and/or whose researchers failed to properly operationalize the type of disability studied. Furthermore, previous studies have often included students from segregated or specialized schools, whose educational and social experiences may be vastly different from those of students attending inclusive schools and classrooms. Further research is needed to specify which subgroups of students with disabilities and which educational settings (i.e., segregated versus integrated) place students at greater risk for negative social experiences with peers. The present study, however, demonstrates that integrated students with non-observable, high-incidence disabilities (i.e., students with specific learning disabilities and mild intellectual disabilities) are not necessarily at greater risk when placed in the regular educational context. Although replication of these findings is, of course, warranted, the matched sample design used in the present study lends confidence to the validity of the results obtained. Future research needs to consider the factors that determine just which students, *with or without disabilities*, are at greatest risk. Rose et al. (2009) begins to identify particular characteristics (e.g., visibility and severity of disability, classroom placement, etc.) that may be implicated.

As previously mentioned, the findings from this present study are a cause for celebration in that they suggest that teachers and administrators are doing a laudable job in promoting healthy and positive inclusion in their classrooms and schools. As Rose (2011) states, “[Effective] inclusive practices could serve as a preventative factor for the victimization of and perpetration by students with disabilities” (e.g., by way of positive behavior modeling, development and practice of social skills, reduction in negative stereotypes, and increased participation in classroom activities) (Rose, 2011, p. 38). It is

worth mentioning, once again, that the data for this present study were collected in an urban school district that has supported a variety of initiatives to promote social responsibility and positive interpersonal relations among students, often in collaboration with a nearby university's faculty and graduate students. As such, the data may reflect an ideal social-emotional learning environment for *all* students.

The evidence presented in the study highlights the need for socio-environmental variables to be considered key factors associated with victimization and perpetration in adolescents with specific learning and mild intellectual disabilities. Future research on adolescents with high-incidence disabilities such as specific learning disabilities and mild intellectual disabilities is needed to clarify the nature of victimization and perpetration (by identifying some of the underlying factors causing and/or exacerbating it), and to develop improved methods of supporting these individuals, as well as their peers without disabilities, through better inclusion practices, prevention, and intervention programs that are tailored to their individual needs.

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Appendix A

Definitions of Special Education Categories (Source: BC Ministry of Education's *Special Education Services: A Manual of Policies, Procedures, and Guidelines*, April 2010)

Intellectual Disabilities

A student with a *mild* intellectual disability has intellectual functioning that is two or more standard deviations below the mean on an individually administered Level C assessment instrument of intellectual functioning, and has limitations of similar degree in adaptive functioning in at least two skill areas appropriate to the student's age.

A student with a *moderate to profound* intellectual disability has intellectual functioning that is three or more standard deviations below the mean on an individually administered Level C assessment instrument of intellectual functioning, and has limitations of similar degree in adaptive functioning in at least two skill areas appropriate to the student's age on a norm-referenced measure of adaptive behaviour (e.g., communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, and health and safety) (p. 40).

Learning Disabilities

Learning disabilities refers to a number of disorders that may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual disabilities.

Learning disabilities result from impairments in one or more processes related to perceiving, thinking, remembering, or learning. These include, but are not limited to: language processing, phonological processing, visual spatial processing, processing speed, memory and attention, and executive functions (e.g., planning and decision-making) (p. 46).

Appendix B

Newsletter Memo to Parents

Survey Update: The XXX School District is looking forward to reviewing district data from the *Safe School & Social Responsibility Survey of Secondary Students* that students completed in January and February of this year. Results should be ready this spring and will help in School and District Growth Plan development for 2006/07.

Once the data are stripped of any identifying information, it is planned that the results will also be used for research purposes and will be analyzed by both UBC and UCFV researchers working with the XSB. These analyses will help the district and the schools better understand the issues that concern our students and assist the schools with planning to meet the needs of students. In addition, these analyses will also be used as part of ongoing research by UBC and UCFV into social issues in secondary schools, in collaboration with the XSB.

Please note that if any parent objects to this use of their child's data for research purposes they should contact Ms _____, Manager for Social Responsibility & Diversity for the XXX School Board by e-mail (_____@xsb.bc.ca) or by phone at (604) XXX-XXXX. Parents may also call the Research Subject Information Line at the University of British Columbia, Office of Research Services, at (604) 822-8598 for information. Otherwise, it will be assumed that consent has been given for use of these data for research purposes.



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Appendix C

Letter to Teachers, Administrators & Counsellors

How Adolescents Feel About School Safety and Responsibility

May 18, 2006

Dear Teachers, Administrators & Counsellors,

My name is Karen Ott VandeKamp, and I am a doctoral student in School Psychology at the University of British Columbia. As part of my doctoral degree, my supervisor, Dr. Shelley Hymel, and I are carrying out a research project at your school called "How Adolescents Feel about School Safety and Responsibility". We would appreciate it if you would help us with this project. To help you make this decision, we are providing you with some information about the project here.

Purpose of the Study:

In January/February 2006, as part of their focus on school safety and social responsibility, the XXX School Board (XSB) conducted a survey with many of the students in your school in an effort to understand how adolescents in high school feel about their school, their classmates, their experiences of bullying, gender harassment, or racial discrimination at school, their level of social responsibility, and their involvement in school and community activities. The survey also asked about student's participation in any high-risk activities (e.g., alcohol and drug use).

Given the time demands and the length of the student survey, many students with special education needs could not participate in this district-wide evaluation. However, their experiences are of equal importance, and for the project proposed here, we are adapting the survey (in consultation with you – special education teachers) so that it can be completed by students with special education needs over several shorter time periods with direct adult support. At the end of this study, we will provide information to the district so that they can make their schools an even safer, more enjoyable place for *all* students to learn, giving students with special educational needs an equal voice in this effort.

Your/Your Students' Involvement:

Students in grades 8 – 12 who attend special education classes (e.g., learning disabilities, mild intellectual disabilities), but who did not participate in the initial district-wide testing, will be asked to complete the adapted survey. Students will complete the survey in their classrooms (or another quiet room in the school) during 2 or 3 short sessions (90 minutes total). Researchers will read the instructions and questions aloud and students will circle the answer that best describes them. This will take place during regular school hours, at a

time chosen by you. You will also be asked to collect completed parental consent forms and provide some brief information on participating students (i.e., number of resource blocks, special education category, whether or not they have a support worker). We will not have access to students' files.

Participation is Voluntary

Only those students who receive permission from their parents will participate. Students must also agree to participate and will be told that they may withdraw from the study at any time without penalty. Students not wishing to participate will complete schoolwork or another activity that you recommend during survey administration. Regardless of whether or not a student chooses to participate, if he/she returns page 3 of the consent form to school, his/her name will be entered in a draw for one of six \$50. gift certificates for A & B Sound.

Confidentiality:

All survey responses will be kept strictly confidential, and will not be shown to parents or to school staff. We are only interested in group results, and will not report results on individual students. No names will appear on the surveys; each student will be assigned a code number.

More Information:

I would welcome the opportunity to visit your classroom to talk with you and your students about the study and to hand out consent forms. This would take approximately 5 to 10 minutes of your time. Please contact me at _____@interchange.ubc.ca or 604.XXX.XXXX to arrange a time. If you are interested in assisting me in adapting the survey for use with students with special education needs, I would also appreciate hearing from you. Finally, if you have any questions about the project, feel free to contact Dr. Shelley Hymel (604.XXX.XXXX) or myself. Thank you for your cooperation in this research project. I look forward to hearing from you in the near future.

Sincerely,

Shelley Hymel, Ph.D.
Professor and Principal Investigator

Karen Ott VandeKamp
Doctoral Candidate and Co-Investigator

Appendix D

Protocol for Distributing Parental Consent Forms

Protocol for Distributing Parental Consent Forms
“How Adolescents Feel About School Safety and Responsibility”
XXX School Board, 2006

CHECKLIST FOR MEETING WITH TEACHER:

- Introductions
- Confirm schedule for distributing consent forms
- Arrange scheduling for collecting data
- Provide envelope for collecting completed consent forms
- Identify any students that are absent
 - Provide envelope with extra consent forms
- Arrange date when all consents should be collected
- Ask teacher for email address, if you don't already have it

INTRODUCTION TO STUDENTS:

Hello. My name is Karen Ott VandeKamp. I'm here from the University of British Columbia to invite you to participate in a research project I am doing at your school with students in grades 8 through 12. The project is called,

“How Adolescents Feel About School Safety and Responsibility”

How many of you have done research projects for school?

- What kinds of thing did you do to find the information you needed to write up your research project?
- Are there any other activities or tasks that someone doing research might do?
 - Going to the library or using the internet to find out facts and background information
 - Interviewing people, doing experiments, asking people to fill out questionnaires
 - Writing up a report

Great! So, I would say that research starts with a question and is about answering a question or several questions. The questions I have are about students your age. The purpose of this project is to learn how students your age think and feel about themselves, their classmates, their school, their experiences of bullying, harassment, or discrimination at school, and the types of activities they participate in at school and in their community. I hope that what I find out will help teachers, principals, and parents better understand students your age and help us make school an even better place for everyone to be and learn.

I am now going to hand out a letter and parental permission form. It talks about the purpose of the study and asks your parents for their permission for you to participate in the study. But, I want you and your parent to sit down together to read it and decide if you would like to participate.

HAND OUT FORMS (get teacher's help if necessary)

I am now going to summarize some of the important points in this letter/permission form. You do not have to read it now. You can just listen.

By taking part in this research project, you will be helping us to learn more about how students your age think and feel about themselves, their classmates, their school, their experiences of bullying, harassment, or discrimination at school, and the types of activities they participate in at school and in their community. If you decide to take part in this study, we will ask you to fill out a questionnaire or survey. Some of the questions will ask you about your background and others will ask you about your social relationships including bullying at your school. Some other questions will ask how you feel about yourself.

This is NOT a test and you won't be graded – there are no right or wrong answers! I am only interested in finding out your opinions and feelings about things. I think that if we are going to learn more about high-school students, we need to come to you and ask you in person. So, you can help teach us how students your age think and feel. **So, you can help us learn more about high school students in Canada.** There is very little research about Canadian students. More research is definitely needed and you can help us understand students better by participating in this research study.

We would like to make the survey as quick and easy to fill out as possible, so instructions and questions will be read out loud to you. All we're asking you to do is fill in a circle that best tells how you feel for each question we read.

Your answers on the survey will be completely confidential or private. What this means is that I will not and cannot show your answers to your teachers, your parents, or anyone else. Your name will NOT be kept with your answers so that no one by the researchers will know who answered the question.

Participating in a research study can be fun and interesting! I have done research projects similar to this one in other high schools and mostly students tell me that they like talking about their experiences and filling out the survey.

In order for you to participate in the study, you need to take home a consent form and give to your parents so that they may sign it. Please do your best to return your consent form to your teacher by tomorrow or by the end of the week at the very latest. **Students who return a signed consent form (whether or not your parent gives you permission to participate) will be entered into a draw for a \$50.00 gift certificate from A & B Sound. One student in each school will be a winner. The draw will take place in June.** Students who do not take part in the study will work quietly on regular classroom work.

Thank you for inviting me to talk to you about my study. Do you have any questions? I really hope you can take part in this study.



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Appendix E

Parental Consent Form

How Adolescents Feel About School Safety and Responsibility

May 2006

Dear Parent(s) or Guardian(s):

I am a graduate student in Education at the University of British Columbia (UBC). As part of my doctoral degree, my supervisor, Dr. Shelley Hymel, and I are carrying out a research project at your child's school. We would appreciate it if you and your child would help us in this project. To help you to make this decision, we are providing information about the project here.

Purpose of the Study:

In January/February 2006, as part of their focus on school safety and social responsibility, the X School District conducted a survey of secondary students in an effort to understand how adolescents in 8th to 12th grade feel about their school, their classmates, their experiences of bullying, gender harassment, or racial discrimination at school, their level of social responsibility, and their involvement in school and community activities. The survey also asked about students' feelings about school and their participation in any high-risk activities (e.g., alcohol & drug use).

Given the time demands and the length of this survey, many students with special education needs could not participate in this district-wide evaluation. However, the experiences of special education students are of equal importance and, for the project proposed here, we have developed an adapted survey (in consultation with special education teachers) that can be completed by special education students (with direct adult support) over several shorter time periods. By examining the differences in responses of students with and without special education needs, we will be able to increase our understanding of and efforts to address issues of school safety and social responsibility, and in turn, inform intervention efforts that benefit *all* students, including students with learning and intellectual disabilities. At the end of this study, we will provide information to the district so that they can make their schools an even safer, more enjoyable place for *all* students to learn, giving special education students an equal voice in this effort.

Your Child's Involvement:

Students in grades 8-12 who attend special education classes, but who did not participate in the initial district-wide testing, will be asked to complete the adapted survey. Students will complete the survey in a quiet room in the school during 2 or 3 short sessions (90 minutes total). Researchers will read the instructions and questions aloud and students will circle the answer that best describes them. This will take place during regular school hours, at a time chosen by the teacher. Special education teachers will be asked to provide some brief information on participating students (i.e., number of resource blocks, special education category), but we will not have access to students' files.

Participation is Voluntary:

Only those special education students who receive permission from their parents will participate. Students must also agree to participate and will be told that they may withdraw from the study at any time. Participation or withdrawal from the study will not affect students' marks, work or class standing in any way. Students not wishing to participate will complete regular schoolwork during survey administration.

Confidentiality:

All survey responses will be kept strictly confidential, and will not be shown to parents or to school staff. We are only interested in group results, and will not report results on individual students. No names will appear on the surveys; your child will be assigned a code number. Surveys will be kept in a secure location in the researchers' office, and computer files will be password protected. Only the researchers will have access to this information.

Incentive for Returning the Consent Form:

We would like to hear from all parents and students. After reading this letter, please talk about the project with your son/daughter and then indicate your choice on the attached consent form (page 3). Please send the consent form back to your son/daughter's school *whether or not* he/she chooses to participate. If your child returns page 3 of this form completed (*whether or not he/she chooses to participate*), their name will be entered in a draw for one of six \$50 gift certificates to a local music store (i.e., A & B Sound).

More Information:

Information about this project is included on the consent form, and a second copy is provided for your records. If you have any questions about the project, feel free to contact Dr. Shelley Hymel at (604) XXX-XXXX. If you have any concerns about your child's treatment or rights as a research participant, please contact the Research Subject Information Line at the University of British Columbia, Office Research Services, at (604) 822-8598. Thank you for your cooperation in this research project.

Sincerely,

Shelley Hymel, Ph.D.
Professor and Principal Investigator

Karen Ott VandeKamp, M.A.
Doctoral Candidate and Co-Investigator

Please complete the section below the dotted line and send the form back to your son/daughter's school within the next five days. Keep the top section for your records. Thank-you.

Consent:

Your and your son/daughter's participation in this study is entirely voluntary and he/she may refuse to participate or withdraw from the study at any time without negative consequences.

Your signature indicates that you have read the consent form, talked about it with your son/daughter, and consent to participate in this study. It also indicates that you have kept a copy of this form for your personal records.

I give my consent/ I do not give my consent (**please circle one**) for my son/daughter to participate.

Parent/Guardian's Name (please print): _____

Parent/Guardian's Signature: _____ Date: _____

Son/Daughter's Name (please print first & last name): _____

✂✂

Consent:

Your and your son/daughter's participation in this study is entirely voluntary and he/she may refuse to participate or withdraw from the study at any time without negative consequences.

Your signature indicates that you have read the consent form, talked about it with your son/daughter, and consent to participate in this study. It also indicates that you have kept a copy of this form for your personal records.

I give my consent/ I do not give my consent (**please circle one**) for my son/daughter to participate.

Parent/Guardian's Name (please print): _____

Parent/Guardian's Signature: _____ Date: _____

Son/Daughter's Name (please print first & last name): _____

I would like to receive a copy of the research results. Yes No

If yes, please provide address: _____

_____ (please include postal code)

**Please return this form to your son/daughter's school within the next five days.
Thank-you!**

Appendix F

Protocol for Survey Administration

Secondary Special Education Students' Perceptions of School Safety and Social Responsibility (UBC Dissertation Research Project)
Instructions for Survey Administration

- Review survey prior to first administration so that you are familiar with instructions, items, and certain terminology, and will be able to address any questions students may have
- Be at school 15 minutes prior to time scheduled for survey administration (see data collection schedule & district map).
- Check in at office, sign name (if applicable), and ask for visitor pass/badge (if applicable).
- Proceed to classroom indicated on data collection schedule (see school map)
- Introduce yourself to teacher, say you're part of the UBC survey research team
- Ask where students will be completing their surveys (e.g., in classroom, library, other room)
- Ask for list of students who have submitted consent forms & will be participating in the study (*only* those students whose parents gave them permission)
- Ask teacher if any last-minute consent forms have come in when class begins
- If so, add these names to student list and draw bag for gift certificate
- Read names of participants out loud.
- Ask teacher if any of the students you mentioned are absent. If so, make a note that they were absent.
- Ask teacher what students should do if they finish early
- If administering survey in same room/area as other participants/research assistants, have students spread their desks out as far as possible so that they cannot see each other's papers
- Hand each student a ruler and explain that they will use it to highlight the question they are working on (demonstrate)
- Please note that at some schools YOU may be asked to read the instructions and questions out loud to students. Do so at a reasonable pace (not too fast – some students need time extra time to process the information – but not too slow either).
Follow the students' lead.
 - Be sure to read out the response options at the end of every question until you are certain that the student doesn't need that prompt anymore. Watch for changes in response formats at the beginning of each new section and prompt accordingly.
 - Please don't forget to pre-teach the vocabulary that is highlighted in both the instructions and survey items (as per our training session) as they appear in each new section of the survey.
- Finally, you may be asked to serve as a scribe for students who need to focus their energies on just listening to the survey instructions and questions. You will be notified of this when you get to the school. In this case, simply circle the answer that the student asks you to.

STEP	LEAD RESEARCHER	RESEARCH ASSISTANT
1.	<p>Introduction to Students “Hello, my name is Karen, and this is ____, ____, and _____. We came here today from UBC to give you the survey about Canadian high-school students. For our project, we want to find out more about how students your age feel about themselves, their classmates, their school, the kinds of activities they participate in at school and in the community, and their experiences of bullying, harassment, and discrimination at school, and we would really appreciate your help in this project.</p> <p>For all of you who remembered to return your consent forms, we will be announcing the winner of the A & B Sound gift certificate <u>at the end of the survey</u> (or at the end of the week). I really want to thank you for remembering to return your signed consent forms to school.”</p>	<p>Please follow along with the Lead Researcher’s protocol, and feel free to remind me if there is something I have forgotten to say or do. Your help is extremely important and very much appreciated!</p>
2.	<p>Non-Participating Students “For those of you who will <i>NOT</i> be filling out the survey, your teacher will explain to you what classroom work you will be working on for the rest of the period.”</p>	
3.	<p>“The following is a list of the students who have their parent’s permission to participate. When I call your name, please hold up your hand and one of the assistants will bring you a survey packet.” (read out names)</p>	<p>Quickly distribute survey packets to students who have raised their hands.</p>
4.	<p>“For those of you who are going to complete the survey, we need to begin by having you clear off your desk and getting out a pen or pencil to write with. Does everyone have something to write with? OK, before we start, there are a few things you need to know: First, this is not a test. There are no right or wrong answers. You won’t be marked or graded. But, even though it’s not a test, it is very serious. We need to make sure that we get accurate and</p>	<p>If a student does not have a pen or pencil, provide them with one.</p>

STEP	LEAD RESEARCHER	RESEARCH ASSISTANT
4 (cont'd)	<p>reliable results in our study, and to do this, we need you to take it seriously, and answer all the questions honestly. Second, your answers are completely confidential. This means that your answers will be kept private. Nobody – not your teachers, classmates, or parents – will see your answers. Third, there will be no talking, unless you need to ask a question. We would like you to keep your answers to yourself. Please do not discuss this survey with your friends. Please don't talk with your classmates or look at someone else's paper. Don't worry about what anyone else puts down, just tell us how you feel."</p>	<p>If a student does not have a pen or pencil, provide them with one.</p>
5.	<p>Explain Student Assent Form "Even though we already have your parent's/guardian's permission for you to complete the survey, we also need your permission. We really need your help and if you would like to help us, please let us know by signing the student consent form that is stapled to your envelope. This form contains the EXACT same information that we gave to you and your parent/guardian on the parental consent form. Does anyone have any questions? If not, please sign the form and remove it from your packet and put it at the top of your desk. One of the assistants will pick it up. We will keep this page separate from the rest of your survey packet so that your name DOES NOT appear anywhere on or near the survey.</p> <p>The last page of the survey has a place for you to write down your name if you would like to talk about any of the things on the survey with your counsellor. This last page is OPTIONAL. This means that you don't have to write down your name. If you do write down your name, we will remove the page from the rest of the survey so that your name does not appear anywhere on the survey."</p>	<p>Circulate around and CAREFULLY check that students have printed both their first and last name, and that their names are <i>legible</i>! If student is obviously done with their student assent form and has not removed it from their packet, carefully remove it. Place all student assent forms in Lead Researcher's envelope labelled, "Completed Student Assent Forms." Each classroom has its own envelope clearly labelled. Please make sure you put the forms in the corresponding envelope.</p>

STEP	LEAD RESEARCHER	RESEARCH ASSISTANT
6.	<p>Administration Begins</p> <p>“Okay, we are ready to begin. Please notice that, even though they look similar, some of the response choices to questions are sometimes very different, so it is really important to listen carefully to the instructions.</p> <p>If you have any questions or concerns please ask your assistant and they will help you.</p> <p>When you are finished the survey, please place it at the top of your desk and pull out something you can work on quietly. Your assistant will come around and check your survey to make sure your survey is complete before collecting it. We want to make sure that we have a response for every question on the survey!</p>	<p>Pick one (or two) student to assist and monitor carefully to ensure that student is following along, understands the instructions, questions, and response formats, and is providing an answer to <u>every</u> question on the survey. Encourage them to use the ruler if necessary.</p> <p>Please pay particular attention to pp. 2 & 3 (up to & including Item 12.) of the survey. Closely monitor students, provide explicit, detailed assistance to complete if necessary. For example, for Item 1, page 2: “What is the <u>first</u> letter of your mother’s <u>first</u> name?” You might say to the student, “What’s your mother’s first name? Sue? Okay, so Sue starts with the letter...S. So, we fill in the bubble/circle next to the S (point to the bubble by the letter S). And so forth.</p> <p>Please remind the student that it is important that they understand what each question is asking. If not, encourage the student to ask you or the lead researcher to clarify.</p> <p>If necessary, remind the student that no one will know how they answered the questions, since there are no names on the surveys.</p>
7.	<p>Monitor students and be available for questions</p>	<p>When a student asks a question about any particular item that is confusing to them – please avoid providing your own interpretation to them. Attempt to re-read the question for them, directing it to the individual student (e.g., “What would you say to me if I said – READ QUESTION). If re-reading the question doesn’t help, see if an example that was given in the training session is available. Please note any issues that arise on your “notes page.”</p>

STEP	LEAD RESEARCHER	RESEARCH ASSISTANT
8.	<p>Keep Track of Time Please note that most teachers have only provided us with 80-90 minutes from start to finish. If necessary, try to pick up the pace.</p>	<p>Continue to monitor students' comprehension and completion of answers.</p> <p>When a student finishes, look through the survey to see if they have provided a response for each question. If a student has accidentally missed or skipped a question, simply say to them, "You must have missed this one, could you please answer it?"</p> <p>Completed & checked surveys are to be put back in their original envelope and then placed in the lead researcher's box.</p>
9.	<p>Information Sheet When students have finished the survey, thank them for their help and let them know that we will be distributing a sheet that contains information that is helpful if they are having a difficult time at school. Let them know that they can take the sheet with them and that all the phone numbers listed on the sheet are free to call.</p>	<p>Hand out a copy of the information sheet to all students (half-sheet size).</p>
10.	<p>Draw for A & B Sound gift certificate (if this is the only or final class in school to complete survey)</p>	<p>** Make sure that you only pull out ONE name. Read out the name of the winner. Give one \$50. gift certificate to the winning student.**</p>
11.	<p>Say good-bye and thank students and teacher for their time. If no draw was made, tell students the draw for the A & B Sound gift certificate will take place at the end of the week and you will contact the teacher if someone in their class has won.</p>	

Suggested definitions or substitutions for highlighted vocabulary

Culture -	Values, beliefs, behaviours, and rules that a particular group of people in a society share
Cyberbullied -	Bullied on the computer or cell phone (give definition provided on the survey)
Ethnic -	Sharing a common & distinctive culture, religion, language, etc.
Gender -	Another word for “sex”, meaning whether you’re a boy or girl, male or female
Race -	A group of people who are related by some common characteristics like skin colour, the country where their family originally came from, culture, share a common language or religion
Racist -	Someone who hates or is disrespectful of another group of people because of their skin colour, religion, language, etc.
Religious service or activity -	Provide examples: church, temple, synagogue, mosque, etc. Hebrew school, Sunday School, youth group, Bible study, Scripture lessons, etc.
Respect -	To see yourself or someone else as being worthwhile, as having good personal qualities or abilities, to be considerate of or accept others
School events -	Provide examples: dances, sports events, concerts, field trips, plays, etc.
Sexual graffiti -	Provide examples such as, drawings or words spray-painted or written on bathroom wall, etc. that talks about someone’s body parts, “for a good time call”, etc.
Sexual Orientation –	Preference in sexual partners, whether you’re interested in, or prefer girls, boys, or both.
Suspension –	Refers to out-of-school suspensions
Drugs (various):	Provide a couple or street names/alternatives if student seems to know what you’re getting at (see below). If they don’t have a clue or they say no, move to the next item. Go through each drug item, even if they say no to previous item:
• Marijuana -	Aunt Mary, baby, (BC) bud, blonde, cannabis, pot, reefer
• Ecstasy -	MDMA, Adam, B, batmans, beans, bens, candies, e-bombs, smartees, 007s
• Hallucinogens-	100s, 25s, A, acid, beans, LSD
• Inhalants -	Aimies, Airblast, Ames, bagging, huff
• Crystal Meth -	Amp, crank, crystal, go, ice, meth, jib, speed
• Cocaine -	Angie, 7-up, barbs, s-ball, snow, blow, crack, batman, big C, blast
• Heroin -	A-bomb, big H, blows, cotton candy, dope, h-bomb

Data Collection Notes

School	Teacher	Notes/Questions Students Asked



Department of Educational and Counselling Psychology, and
 Special Education
 Faculty of Education
 2125 Main Mall
 Vancouver, B.C. V6T 1Z4

Appendix G

Student Assent Form

HOW ADOLESCENTS FEEL ABOUT SCHOOL SAFETY AND RESPONSIBILITY

Dear Student

As part of my requirements for graduate school, my professor and I are carrying out a research project at your school. We would like you to take part in our research project called "How Adolescents Feel about School Safety and Responsibility". The goal of this project is to find out how adolescents feel about their school, their classmates, their experiences of bullying, harassment, or discrimination at school, and the types of activities they participate in at school and in their community.

Your parents have said that it is okay with them for you to work on this project, but you also have to decide if it okay for you. You can decide that you don't want to be in the project. It is not a problem if you decide not to be in the project – now or later on. This project has nothing to do with your schoolwork, and you will not be punished if you decide not to take part or your change your mind part way through the project. Whether or not you choose to take part, your name will be entered into a draw for 1 of 6 \$50.00 A & B Sound gift certificates if you return a completed consent form to school.

If you decide to take part, you will be asked to listen to us read some questions, and then check off or circle the answer that is true for you. We will help if you have questions. Your part in the project will take about one whole class period (90 minutes), but we will divide up the time into smaller chunks if it will make it easier for you. If you complete the questionnaire, you are giving us your permission to participate. The answers you give will be private, and will not be shared with anyone. We will not show your answers to teachers, the principal, or your parents. This is not a test, so you should give your own opinion. We are just interested in seeing how most kids your age answer our questions.

We will be happy to answer any questions you have now, or you can call Karen Ott VandeKamp (604-XXX-XXXX) or Shelley Hymel at the University of British Columbia (604-XXX-XXXX) if you have questions later. If you have any concerns about your rights as a participant in this project, you can call the University of British Columbia's Office of Research Services at (604) 822-8598.

If you want to take part in the research project, please print your name neatly on the line below. This will tell us that you understand what the project is about and that your questions have been answered.

Student's Name: _____
 (Please print first and last name)

Date: _____, 2006

Signature: _____

Appendix H

Adapted Student Survey

XSB

2006 Safe School *and* Social Responsibility

Adapted Survey

for Secondary Students

This survey gives students a chance to be heard and helps us understand what students are going through at school and in the community.

DO NOT write your name on this survey.

We want you to answer honestly, so we agree to keep your answers private. That means that no one will know what you answered.

This survey is **voluntary**. You do not have to take this survey, but if you choose to do it, it may help to know that your answers are private or **confidential**.

This is not a test and there are no right or wrong answers.

Your answers on the survey will not affect your grades or marks in school.

To make it easier, we will read the instructions and the questions out loud.

If you don't want to answer a question or if you don't know what it means, just leave it blank. For the questions that you do answer, fill in the bubbles (circles) completely.

Thank you very much for your help.

Do NOT print your name on this survey

Your answers are private; this means that no one will know that these are your answers.

Over the next few years, the X School District may ask students to complete this survey again and we want to be able to see if students' answers change later on. We also want to protect your privacy and keep people from knowing how you answered these questions. To do this, each student will create their own "privacy code" from questions about things that will only be true for you but will not tell who you are. Your answers to the questions on this page will be used to create your "privacy code", a personal identification number. If you take this survey again next year, or sometime later, we can just ask you these questions again and you can re-create your "privacy code".

Remember, the survey is private. These questions allow us to see if the answers students give now change later on, but they CANNOT tell us who you are.

1. What is the first letter of your mother's first name?

- A B C D E F G H I J K
 L M N O P Q R S T U V
 W X Y Z Don't Know

2. What is the last number of the year you were born?

- 0 1 2 3 4 5 6 7 8 9

3. What is the last letter of your last name?

- A B C D E F G H I J K
 L M N O P Q R S T U V
 W X Y Z Don't Know

4. What is the third letter of the month you were born?

- A B C D E F G H I J K
 L M N O P Q R S T U V
 W X Y Z Don't Know

5. How many older brothers and sisters do you have?

- 0 1 2 3 4 5 6 7 8 9

SECTION A

6. What is the name of your school? _____
7. What grade are you in? 8 9 10 11 12
8. Are you are boy or a girl? Boy Girl
9. What is your racial/ethnic background? **Choose one.**
- Mixed. Please describe. _____
 - Aboriginal (First Nations, Non-Status Indian, Inuit, Métis)
 - African/Caribbean (Black)
 - Asian (Cambodian, Chinese, Japanese, Korean, Taiwanese, Thai, Vietnamese, Filipino)
 - South Asian (East-Indian, Indo-Canadian, Pakistani)
 - Caucasian (White, European, Russian)
 - Latin American (Mexican, Portuguese, South American, Spanish)
 - Middle Eastern (Arabic, Iranian, Kuwaiti, Persian, Turkish, Israeli, Palestinian)
 - I don't know.
10. How long have you lived in Canada?
I have lived in Canada for: less than 2 years 2-4 years more than 4 years
11. What language do you speak at home? English Other
12. a. Compared to other students, how well did you do in your school work in elementary school?
- Better than most students
 - About the same as most students
 - Worse than most students
 - I'm not sure

SECTION A

12. b. Compared to other students, how well are you doing in your school work now, in high school?
- Better than most students
 - About the same as most students
 - Worse than most students
 - I'm not sure
13. a. When you were in elementary (grade) school, how much did other students like you?
- Better than most students
 - About the same as most students
 - Worse than most students
 - I'm not sure
- b. Now that you are in high school, how much do other students like you?
- Better than most students
 - About the same as most students
 - Worse than most students
 - I'm not sure
14. What is your sexual orientation?
- Gay, lesbian (homosexual)
 - Bisexual
 - Straight (heterosexual)
 - I'm not sure

SECTION B

The next questions ask about bullying and harassment. Students can bully and harass others in different ways. Please tell us what kinds of bullying and harassment **HAVE BEEN DONE TO YOU** this school year, and *how often* it has happened.

Bullying and harassment happens when a person who has more power or some advantage (bigger, older, in a higher grade, etc.) tries to bother, hurt, make fun of or attack another person (it's not an accident), and does it again and again. Sometimes several students will bully or harass another student or group of students.

- | | | | | | | |
|--------|--|-------|---------------------|--------------------|------------|--------------------|
| 15. a. | How often have you been bullied and harassed? | Never | Once or a few times | About once a month | Every week | Every week or more |
| b. | How often have you been physically bullied (hit, shoved, kicked)? | Never | Once or a few times | About once a month | Every week | Every week or more |
| c. | How often have you been verbally bullied, called names, teased, threatened, put down)? | Never | Once or a few times | About once a month | Every week | Every week or more |
| d. | How often have you been socially bullied (left out, rumours, gossip, humiliated)? | Never | Once or a few times | About once a month | Every week | Every week or more |
| e. | How often have you been cyberbullied (used computer or text messages to threaten, humiliate, or make you feel left out)? | Never | Once or a few times | About once a month | Every week | Every week or more |

The next questions ask about bullying and harassment **YOU HAVE TAKEN PART IN DOING TO OTHERS** this school year.

- | | | | | | | |
|--------|---|-------|---------------------|--------------------|------------|--------------------|
| 16. a. | How often have you bullied or harassed other students? | Never | Once or a few times | About once a month | Every week | Every week or more |
| b. | How often have you physically bullied others? | Never | Once or a few times | About once a month | Every week | Every week or more |
| c. | How often have you verbally bullied others (called names, teased, threatened, put them down)? | Never | Once or a few times | About once a month | Every week | Every week or more |
| d. | How often have you socially bullied others (left out, rumours, gossip, humiliated)? | Never | Once or a few times | About once a month | Every week | Every week or more |
| e. | How often have you cyberbullied others (used computer or text messages to threaten, humiliate, or make others feel left out)? | Never | Once or a few times | About once a month | Every week | Every week or more |

SECTION B

The next questions ask about gender harassment. Please tell us *what kinds* of gender harassment **HAVE BEEN DONE TO YOU** this school year, and *how often* it has happened.

Gender harassment is unwelcome and unwanted behaviour about sex and gender that interferes with your life and makes you feel uncomfortable, even if the people doing the harassing were only joking. These questions are NOT asking about behaviours that you like or want (for example, when you want someone to kiss you or when you flirt with a girlfriend or a boyfriend).

- | | | | | | | |
|--------|--|-------|---------------------|--------------------|------------|--------------------|
| 17. a. | How often has someone said you did not look or act enough like a boy or girl? | Never | Once or a few times | About once a month | Every week | Every week or more |
| b. | How often has someone called you gay, fag, lesbian, or something like that? | Never | Once or a few times | About once a month | Every week | Every week or more |
| c. | How often has someone spread sexual rumors or notes, written sexual graffiti about you? | Never | Once or a few times | About once a month | Every week | Every week or more |
| d. | How often has someone made unwelcome or rude comments about your body or your sexual behaviour? | Never | Once or a few times | About once a month | Every week | Every week or more |
| e. | How often has someone yelled something sexual or whistled/howled at you as you walked by? | Never | Once or a few times | About once a month | Every week | Every week or more |
| f. | How often has someone made you uncomfortable by making sexual hand gestures or staring at you in a sexual way? | Never | Once or a few times | About once a month | Every week | Every week or more |
| g. | How often has someone made you uncomfortable by using sexual language that was hurtful? | Never | Once or a few times | About once a month | Every week | Every week or more |
| h. | How often has someone stood too close to you or brushed up against you in a sexual way that you did not want? | Never | Once or a few times | About once a month | Every week | Every week or more |
| i. | How often has someone touched, kissed, grabbed, or pinched you in a sexual way that you did not want? | Never | Once or a few times | About once a month | Every week | Every week or more |

SECTION B

j.	How often has someone convinced or encouraged you to do something sexual (other than kissing) that you did not want?	Never	Once or a few times	About once a month	Every week	Every week or more
k.	How often has someone forced or threatened you to do something sexual (other than kissing) that you did not want?	Never	Once or a few times	About once a month	Every week	Every week or more
l.	Girls only: How often has someone pressured you to participate in sexual activities with others? Boys only: How often has someone pressured you to participate in sexual activities with others?	Never	Once or a few times	About once a month	Every week	Every week or more

The next questions ask about gender harassment YOU HAVE TAKEN PART IN DOING TO OTHERS this school year.

18. a.	How often have you said someone did not look or act enough like a boy or girl?	Never	Once or a few times	About once a month	Every week	Every week or more
b.	How often have you called someone gay, fag, lesbian, or something like that?	Never	Once or a few times	About once a month	Every week	Every week or more
c.	How often have you spread sexual rumors or notes, written sexual graffiti about someone?	Never	Once or a few times	About once a month	Every week	Every week or more
d.	How often have you made unwelcome or rude comments about someone's body or their sexual behaviour?	Never	Once or a few times	About once a month	Every week	Every week or more
e.	How often have you yelled something sexual or whistled/howled as someone walked by?	Never	Once or a few times	About once a month	Every week	Every week or more
f.	How often have you made someone uncomfortable by making sexual hand gestures or staring at him or her in a sexual way?	Never	Once or a few times	About once a month	Every week	Every week or more
g.	How often have you made someone uncomfortable by using sexual language that was hurtful?	Never	Once or a few times	About once a month	Every week	Every week or more
h.	How often have you stood too close to someone or brushed up against them in a sexual way that he or she did not want?	Never	Once or a few times	About once a month	Every week	Every week or more

SECTION B

- | | | | | | | |
|----|---|-------|---------------------|--------------------|------------|--------------------|
| i. | How often have you touched, kissed, grabbed, or pinched someone in a sexual way that he or she did not want? | Never | Once or a few times | About once a month | Every week | Every week or more |
| j. | How often have you convinced or encouraged someone to do something sexual (other than kissing) that she or he did not want? | Never | Once or a few times | About once a month | Every week | Every week or more |
| k. | How often have you forced or threatened someone to do something sexual (other than kissing) that he or she did not want? | Never | Once or a few times | About once a month | Every week | Every week or more |
| l. | <p>Girls only: How often have you pressured other girls to participate in sexual activities with others?</p> <p>Boys only: How often have you pressured other boys to participate in sexual activities with others?</p> | Never | Once or a few times | About once a month | Every week | Every week or more |
| | | Never | Once or a few times | About once a month | Every week | Every week or more |

SECTION B

The next questions ask about discrimination. Students can discriminate against others in different ways. Please tell us *what kinds* of discrimination **HAVE BEEN DONE TO YOU this school year**, and *how often* it has happened.

Discrimination is when people are treated unfairly or seen as being less important because of their racial or ethnic background, culture, the colour of their skin, sexual orientation, or other differences.

- | | | | | | | |
|--------|--|-------|---------------------|--------------------|------------|--------------------|
| 19. a. | How often has someone said negative things to you or teased you about your culture or race? | Never | Once or a few times | About once a month | Every week | Every week or more |
| b. | How often has someone said negative things to you or teased you about your sexual orientation (because you're straight, gay, or bisexual)? | Never | Once or a few times | About once a month | Every week | Every week or more |
| c. | How often has someone made you feel bad about your culture or race? | Never | Once or a few times | About once a month | Every week | Every week or more |
| d. | How often has someone made you feel bad about your sexual orientation (straight, gay, bisexual)? | Never | Once or a few times | About once a month | Every week | Every week or more |
| e. | How often has someone called you racist names? | Never | Once or a few times | About once a month | Every week | Every week or more |
| f. | How often has someone told jokes about your culture or race? | Never | Once or a few times | About once a month | Every week | Every week or more |
| g. | How often has someone told jokes about your sexual orientation (straight, gay, bisexual)? | Never | Once or a few times | About once a month | Every week | Every week or more |
| h. | How often has someone used swear words when talking about your cultural or racial group? | Never | Once or a few times | About once a month | Every week | Every week or more |
| i. | How often has someone used swear words when talking about your sexual orientation (straight, gay, bisexual)? | Never | Once or a few times | About once a month | Every week | Every week or more |
| j. | How often has someone told others that your cultural or racial group is dangerous? | Never | Once or a few times | About once a month | Every week | Every week or more |
| k. | How often has someone told others that people of your sexual orientation (straight, gay, bisexual) are dangerous? | Never | Once or a few times | About once a month | Every week | Every week or more |

SECTION B

l.	How often has someone treated your racial or ethnic group as less important or inferior to their own?	Never	Once or a few times	About once a month	Every week	Every week or more
m.	How often has someone treated your sexual orientation (straight, gay, bisexual) as less important or inferior to their own?	Never	Once or a few times	About once a month	Every week	Every week or more
n.	How often has someone made you feel left out because of your culture or race?	Never	Once or a few times	About once a month	Every week	Every week or more
o.	How often has someone made you feel left out because of your sexual orientation (straight, gay, bisexual)?	Never	Once or a few times	About once a month	Every week	Every week or more

The next questions ask about discrimination YOU HAVE TAKEN PART IN DOING TO OTHERS this school year.

20.a.	How often have you said negative things or teased someone about their culture or race?	Never	Once or a few times	About once a month	Every week	Every week or more
b.	How often have you said negative things or teased someone about their sexual orientation (because they're straight, gay, or bisexual)?	Never	Once or a few times	About once a month	Every week	Every week or more
c.	How often have you made someone feel bad about their culture or race?	Never	Once or a few times	About once a month	Every week	Every week or more
d.	How often have you made someone feel bad about their sexual orientation (straight, gay, bisexual)?	Never	Once or a few times	About once a month	Every week	Every week or more
e.	How often have you called someone racist names?	Never	Once or a few times	About once a month	Every week	Every week or more
f.	How often have you told jokes about someone's culture or race?	Never	Once or a few times	About once a month	Every week	Every week or more
g.	How often have you told jokes about someone's sexual orientation (straight, gay, bisexual)?	Never	Once or a few times	About once a month	Every week	Every week or more

SECTION B

h.	How often have you used swear words when talking about certain cultural or racial groups?	Never	Once or a few times	About once a month	Every week	Every week or more
i.	How often have you used swear words when talking about gays and lesbians?	Never	Once or a few times	About once a month	Every week	Every week or more
j.	How often have you told others that certain cultural or racial groups are dangerous?	Never	Once or a few times	About once a month	Every week	Every week or more
k.	How often have you told others that people who are straight, gay, or bisexual are dangerous?	Never	Once or a few times	About once a month	Every week	Every week or more
l.	How often have you treated someone's racial or ethnic group as less important or inferior to my own?	Never	Once or a few times	About once a month	Every week	Every week or more
m.	How often have you treated someone's sexual orientation (straight, gay, bisexual) as less important or inferior to your own?	Never	Once or a few times	About once a month	Every week	Every week or more
n.	How often have you made someone feel left out because of their culture or race?	Never	Once or a few times	About once a month	Every week	Every week or more
o.	How often have you made someone feel left out because of their sexual orientation (straight, gay, bisexual)?	Never	Once or a few times	About once a month	Every week	Every week or more

SECTION B

What do you do when you have been picked on, bullied, discriminated against, harassed, or attacked at school?

If this has NOT happened to you, you can skip to the next page.

21. When you have been picked on, discriminated again, bullied, harassed, or attacked...

a.	How often have you told the person(s) to stop?	Never	Hardly ever	Some of the time	Most of the time	Always
b.	How often have you talked to the person about it?	Never	Hardly ever	Some of the time	Most of the time	Always
c.	How often have you walked away?	Never	Hardly ever	Some of the time	Most of the time	Always
d.	How often have you ignored or avoided the person?	Never	Hardly ever	Some of the time	Most of the time	Always
e.	How often have you done something to distract the person (got them to think of something else)?	Never	Hardly ever	Some of the time	Most of the time	Always
f.	How often have you stayed home from school?	Never	Hardly ever	Some of the time	Most of the time	Always
g.	How often have you got your friends to get back at the person?	Never	Hardly ever	Some of the time	Most of the time	Always
h.	How often have you fought back physically?	Never	Hardly ever	Some of the time	Most of the time	Always
i.	How often have you found a new friend or group of friends?	Never	Hardly ever	Some of the time	Most of the time	Always
j.	How often have you talked to an adult at home?	Never	Hardly ever	Some of the time	Most of the time	Always
k.	How often have you talked to another teen/youth about it?	Never	Hardly ever	Some of the time	Most of the time	Always
l.	How often have you reported it to an adult at school?	Never	Hardly ever	Some of the time	Most of the time	Always

SECTION B

21. When you have been picked on, discriminated against, bullied, harassed, or attacked...

m.	How often have you got your friends to help you solve the problem?	Never	Hardly ever	Some of the time	Most of the time	Always
n.	How often have you talked to the person's friend about it?	Never	Hardly ever	Some of the time	Most of the time	Always
o.	How often have you done nothing?	Never	Hardly ever	Some of the time	Most of the time	Always

What do you do when you have seen others being picked on, bullied, discriminated against, harassed, or attacked at school?

If you have not seen others being picked on, bullied, discriminated against, harassed, or attacked this school year, you can skip to question 23 (page 14).

22. When you have seen others being picked on, discriminated against, bullied, harassed, or attacked...

a.	How often have you told the person(s) doing the bullying to stop?	Never	Hardly ever	Some of the time	Most of the time	Always
b.	How often have you talked to the person(s) doing the bullying?	Never	Hardly ever	Some of the time	Most of the time	Always
c.	How often have you talked to the bullying person's friends about it?	Never	Hardly ever	Some of the time	Most of the time	Always
d.	How often have you walked away?	Never	Hardly ever	Some of the time	Most of the time	Always
e.	How often have you ignored or avoided the person who bullied?	Never	Hardly ever	Some of the time	Most of the time	Always
f.	How often have you done something to distract the person(s) who bullied (got them to think of something else)?	Never	Hardly ever	Some of the time	Most of the time	Always
g.	How often have you helped the person being hurt to get away?	Never	Hardly ever	Some of the time	Most of the time	Always
h.	How often have you talked afterwards to the person who was hurt?	Never	Hardly ever	Some of the time	Most of the time	Always
i.	How often have you got your friends to help solve the problem?	Never	Hardly ever	Some of the time	Most of the time	Always

SECTION B

22. When you have seen others being picked on, discriminated against, bullied, harassed, or attacked...

j.	How often have you got your friends to get back at the other person(s)?	Never	Hardly ever	Some of the time	Most of the time	Always
k.	How often have you stayed home from school?	Never	Hardly ever	Some of the time	Most of the time	Always
l.	How often have you talked to an adult at home?	Never	Hardly ever	Some of the time	Most of the time	Always
m.	How often have you talked to another teen/youth about it?	Never	Hardly ever	Some of the time	Most of the time	Always
n.	How often have you reported it to an adult at school?	Never	Hardly ever	Some of the time	Most of the time	Always
o.	How often have you talked about it with an adult at school?	Never	Hardly ever	Some of the time	Most of the time	Always
p.	How often have you done nothing?	Never	Hardly ever	Some of the time	Most of the time	Always

TAKE A SHORT BREAK IF YOU NEED IT

The next questions ask about feeling safe. *Safe means feeling comfortable, relaxed, and not worried that something bad could happen to you.*

23. For each item, please circle the answer that best tells how you feel.

a.	I feel safe at school.	Never	Hardly ever	Some of the time	Most of the time	Always
b.	I feel safe at school activities and events (dances, field trips, clubs, sporting events).	Never	Hardly ever	Some of the time	Most of the time	Always
c.	I feel safe on my way to and from school.	Never	Hardly ever	Some of the time	Most of the time	Always
d.	I feel safe in my neighbourhood or community.	Never	Hardly ever	Some of the time	Most of the time	Always

SECTION C

A lot of attention has been given to the serious problems that some teens face these days. We want to know about *your* experiences at school or school events (dances, sports, trips), this school year. These questions ask about *how often* some things happen to you. Circle the answer that best tells how you feel.

24. a.	Are you often worried or afraid that you will be attacked or hurt by other students?	Never	Hardly ever	Some of the time	Most of the time	Always
b.	Are you often worried or afraid that you will be attacked or threatened with a weapon?	Never	Hardly ever	Some of the time	Most of the time	Always
c.	Are you often worried or afraid that you will be talked into doing things you are not comfortable with by other students?	Never	Hardly ever	Some of the time	Most of the time	Always
d.	Are you often worried or afraid that you will have rumours or gossip spread about you?	Never	Hardly ever	Some of the time	Most of the time	Always
e.	Are you often worried or afraid that you will be forced to engage in sexual acts by other students?	Never	Hardly ever	Some of the time	Most of the time	Always
f.	Are you often worried or afraid that you will be verbally harassed or embarrassed at school?	Never	Hardly ever	Some of the time	Most of the time	Always
g.	Are you often worried or afraid that you will be made fun of or left out because of your culture or race?	Never	Hardly ever	Some of the time	Most of the time	Always
h.	Are you often worried or afraid that you will be made fun of or left out because of how you look or because of a physical disability?	Never	Hardly ever	Some of the time	Most of the time	Always
i.	Are you often worried or afraid that you will be made fun of or left out because of how well or how poorly you do in school?	Never	Hardly ever	Some of the time	Most of the time	Always
j.	Are you often worried or afraid that you will be made fun of or left out because of your sexual orientation (straight, gay, bisexual)?	Never	Hardly ever	Some of the time	Most of the time	Always

SECTION C

These questions ask how you feel about things—about yourself and about school, this school year. Please circle the answer that best tells how you feel. For this set of questions,

NO means definitely or really no
 no means mostly almost always no
 sometimes means sometimes yes and sometimes no
 yes means mostly or almost always yes
 YES means definitely or always yes

- | | | | | | | |
|-----|---|----|----|-----------|-----|-----|
| 25. | The adults at my school treat students fairly. | NO | no | sometimes | yes | YES |
| 26. | My ideas and opinions are important to at least one adult in my school. | NO | no | sometimes | yes | YES |
| 27. | I can get extra help from adults at my school if I need it. | NO | no | sometimes | yes | YES |
| 28. | I can get extra help from my family if I need it. | NO | no | sometimes | yes | YES |
| 29. | My school provides me with chances to get involved in community activities. | NO | no | sometimes | yes | YES |
| 30. | At least one adult at my school accepts or understands my feelings. | NO | no | sometimes | yes | YES |
| 31. | I feel awkward and out of place at my school. | NO | no | sometimes | yes | YES |
| 32. | I like school. | NO | no | sometimes | yes | YES |
| 33. | I liked elementary school. | NO | no | sometimes | yes | YES |
| 34. | I feel like I belong at my school. | NO | no | sometimes | yes | YES |
| 35. | Other students at my school accept me as I am. | NO | no | sometimes | yes | YES |
| 36. | When I have a problem, there are students who will help me. | NO | no | sometimes | yes | YES |
| 37. | Students at my school really care about each other. | NO | no | sometimes | yes | YES |

SECTION C

Please circle the answer that best tells how you feel.

38.	Adults in my school respect me.	NO	no	sometimes	yes	YES
39.	Adults in my family respect me.	NO	no	sometimes	yes	YES
40.	Students in my school just care about themselves.	NO	no	sometimes	yes	YES
41.	Adults in my school really care about students.	NO	no	sometimes	yes	YES
42.	Students at my school work together to solve problems.	NO	no	sometimes	yes	YES
43.	There is an adult in my school that I can go to for support or advice or talk to about my problems and worries.	NO	no	sometimes	yes	YES
44.	There is an adult in my family that I can go to for support or advice or talk to about my problems or worries.	NO	no	sometimes	yes	YES
45.	In my school, students have a say in deciding what goes on.	NO	no	sometimes	yes	YES
46.	Students treat teachers and adults at schools with respect.	NO	no	sometimes	yes	YES
47.	I know what the school rules say about appropriate student behaviour.	NO	no	sometimes	yes	YES
48.	The adults at my school have talked to us about appropriate student behaviour.	NO	no	sometimes	yes	YES
49.	Adults at my school do a good job of dealing with bullying and harassment.	NO	no	sometimes	yes	YES
50.	Adults at my school do a good job of Dealing with physical violence (punching, kicking, weapons).	NO	no	sometimes	yes	YES

SECTION D

Some teens/ youth get involved in different kinds of risky or dangerous activities. We want to know about *your* experiences at school, at school events (like dances, sports, trips), or in the community (outside of school). These next questions ask about *how often* you get involved in some activities. Please answer truthfully and remember that your answers are private. This means that no one will know how you answered the questions. Circle the best answer.

51. Have you *ever* used alcohol or drugs at school, school events, or in the community?

YES NO

If you circled NO, skip to question 55 (page 19).

52. If you answered YES, ***where*** have you used drugs or alcohol?
(*you can circle more than one answer*)

SCHOOL SCHOOL EVENTS COMMUNITY

If you circled SCHOOL, please answer the rest of the questions on this page.

How often have you participated in the following activities AT SCHOOL this school year?

53. a. How often have you drunk alcohol?	Never	Once or a few times	Every week or more
b. How often have you drunk more than five alcoholic drinks at one time?	Never	Once or a few times	Every week or more
c. How often have you been drunk or had too much to drink?	Never	Once or a few times	Every week or more
54. a. How often have you used marijuana?	Never	Once or a few times	Every week or more
b. How often have you used ecstasy?	Never	Once or a few times	Every week or more
c. How often have you used hallucinogens (LSD, acid)?	Never	Once or a few times	Every week or more
d. How often have you used inhalants (glue, gas, aerosol)?	Never	Once or a few times	Every week or more
e. How often have you used prescription pills that your doctor did not give you?	Never	Once or a few times	Every week or more

SECTION D

f.	How often have you used crystal meth?	Never	Once or a few times	Every week or more
g.	How often have you used cocaine?	Never	Once or a few times	Every week or more
h.	How often have you used heroin?	Never	Once or a few times	Every week or more
i.	How often have you been “high” because of any of the drugs listed above	Never	Once or a few times	Every week or more

How often have you been involved in the following activities AT SCHOOL this school year?

55.	How often have you hurt or harmed someone by pushing, slapping, or hitting?	Never	Once or a few times	Every week or more
56.	How often have you threatened someone with physical harm?	Never	Once or a few times	Every week or more
57.	How often have you carried a weapon?	Never	Once or a few times	Every week or more
58.	How often have you threatened someone with a weapon?	Never	Once or a few times	Every week or more
59.	How often have you been involved in physical violence with a weapon?	Never	Once or a few times	Every week or more
60.	How often have you stolen something or purposely damaged property (including graffiti)?	Never	Once or a few times	Every week or more

SECTION E

These questions ask how you feel about things—about yourself and about school, this school year.

61. For each item, please circle the answer that best tells how you feel.

a. I do lots of important things.	NO	no	sometimes	yes	YES
b. In general, I like being the way I am.	NO	no	sometimes	yes	YES
c. Overall, I have a lot to be proud of.	NO	no	sometimes	yes	YES
d. I can do things as well as most other people.	NO	no	sometimes	yes	YES
e. Other people think I am a good person.	NO	no	sometimes	yes	YES
f. A lot of things about me are good.	NO	no	sometimes	yes	YES
g. I am as good as most other people.	NO	no	sometimes	yes	YES
h. When I do something, I do it well.	NO	no	sometimes	yes	YES

For the next set of questions, circle the answer that best tells how you feel.

62. a. How often have you been suspended from school?

Never	At least once this year	About once a month	About once a week	More than once a week
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b. How often have you skipped a class?

Never	At least once this year	About once a month	About once a week	More than once a week
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c. How often have you skipped school all day.

Never	At least once this year	About once a month	About once a week	More than once a week
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SECTION E

Circle the answer that best tells *how often* you have participated in each of these school or community events, this school year.

63. a.	How often have you participated in a school club or group?	Never	Once or twice	Once a month	About once a week	More than once a week
b.	How often have you participated in a community club or organization (Air Cadets, youth orchestra, community theatre group)?	Never	Once or twice	Once a month	About once a week	More than once a week
c.	How often have you attended a religious service or activity?	Never	Once or twice	Once a month	About once a week	More than once a week
d.	How often have you attended a school dance?	Never	Once or twice	Once a month	About once a week	More than once a week
e.	How often have you participated in drama, art or music activities at school?	Never	Once or twice	Once a month	About once a week	More than once a week
f.	How often have you played on a school sports team?	Never	Once or twice	Once a month	About once a week	More than once a week
g.	How often have you participated in physical activities other than a school sports team?	Never	Once or twice	Once a month	About once a week	More than once a week
h.	How often have you tutored or helped other students?	Never	Once or twice	Once a month	About once a week	More than once a week
i.	How often have you participated in a group to make school a better place?	Never	Once or twice	Once a month	About once a week	More than once a week
j.	How often have you participated in a group to make your community a better place?	Never	Once or twice	Once a month	About once a week	More than once a week
k.	How often have you led or organized an activity at your school?	Never	Once or twice	Once a month	About once a week	More than once a week
l.	How often have you led or organized an activity in your community?	Never	Once or twice	Once a month	About once a week	More than once a week

Thank you for taking this survey!

INFORMATION SHEET FOR STUDENTS

If you are having problems with other students or with a difficult situation at school, please know that you do not have to face it alone; you can get help.

You can talk to your parents or other family members; they may have some ideas that you have not yet thought of.

You can talk to any adult that you trust at the school – a counsellor, a teacher or coach, a custodian, a youth worker, a bus driver, etc.

We want to help...contact us.

If you would like help with some problems you are having at school, you can also put your name and phone number here and someone at the school will contact you:

Name (first name, last name):

Phone number or email address to contact you:

If you would like help from someone outside of the school,
You could call one of the following help lines
(*1-800 numbers can be called FREE from payphones, no money needed):

BC Crisis Line (24 hour): 604-872-3311 Toll free: 1-866-661-3311

Help Line for Children (24 hour): 604-310-1234

Kids Help Phone: 1-800-668-6868

Youth Against Violence: 1-800-680-4264

or you can get help on-line from the web;
contact:

www.youthinbc.com

THANK YOU FOR COMPLETING THIS SURVEY...

Your feedback will help us to make this school safe for *all* students.